

applied catalysis

**CUMULATIVE AUTHOR AND SUBJECT INDEXES
VOLUMES 41-60**

AUTHOR INDEX

VOLUMES 41-60

A

- Abbot, J.
Cracking reactions of C₆ paraffins on HZSM-5 (57)105
- Abbot, J.
Role of Bronsted and Lewis acid sites during cracking reactions of alkanes (47)33
- Abe, H., Yokota, Y. and Okabe, K.
Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine (52)171
- Absi-Halabi, M., see Stanislaus, A. (50)237
- Absi-Halabi, M., see Stanislaus, A. (41)109
- Acharya, D.R., Ghassemi, M.R. and Hughes, R.
Coking and regeneration of zeolite catalysts in fixed beds during cumene cracking (58)53
- Acharya, D.R., Hughes, R. and Li, K.
Deactivation of silica-alumina catalyst during the cumene cracking reaction (52)115
- Addison, S.W., Cartledge, S., Harding, D.A. and McElhiney, G.
Role of zeolite non-framework aluminium in catalytic cracking (45)307
- Adkins, B.D., Milburn, D.R., Goodman, J.P. and Davis, B.H.
Mechanism for coking of coal liquefaction catalysts involving basic nitrogen compounds, sodium and catalyst acid sites (44)199
- Adnot, A., see Rahman, A. (50)131
- Aduriz, H.R., Bodnariuk, P., Dennehy, M. and Gigola, C.E.
Activity and selectivity of Pd/ α -Al₂O₃ for ethyne hydrogenation in a large excess of ethene and hydrogen (58)227
- Agarars, H., Cerrella, G. and Laborde M.A.
Copper catalysts for the steam reforming of methanol. Analysis of the preparation variables (45)53
- Agarwal, S.K., Migone, R.A. and Marcelin, G.
Oxidative coupling of methane over alkali-doped antimony oxide (53)71
- Aguiayo, A.T., see Gonzalez-Marcos, J.A. (60)1
- Aguero, A., see Kvisle, S. (43)117
- Aguinaga, A., De La Cal, J.C., Asua, J.M. and Montes, M.
Effect of the preparation on the activity and selectivity of supported nickel catalysts (51)1
- Ahlström, A.F. and Odenbrand, C.U.I.
Combustion of soot deposits from diesel engines on mixed oxides of vanadium pentoxide and cupric oxide (60)157
- Ahlström, A.F. and Odenbrand, C.U.I.
Catalytic combustion of soot deposits from diesel engines (60)143
- Ahmed, S., Moffat, J.B.
Role of carbon tetrachloride in the conversion of methane on silica-supported alkali metal added alkaline earth oxide catalysts (58)83
- Ahmed, S., and Moffat, J.B.
Oxidative coupling of methane over thallium-based silica supported catalysts (54)241
- Ai, M.
Reaction of acetic acid with methanol over vanadium-titanium binary phosphate catalysts in the presence of oxygen (59)227
- Ai, M.
Preparation of high-surface-area titanium-vanadium binary pyrophosphate catalysts (48)51
- Ai, M.
Effect of the composition of vanadium-titanium binary phosphate on catalytic performance in vapor-phase aldol condensation (54)29
- Akhtar Hussain Zaidi, S.
Liquid-phase oxidation of cyclohexanone to adipic acid catalysed by cobalt and bromide ions in acetic acid (42)247
- Akubuiro, E.C., Vekyrios, X.E. and Ioannides, T.
Influence of carrier doping on catalytic performance of titanium dioxide-supported platinum (46)297
- Al-Dolama, K., see Stanislaus, A. (50)237
- Al-Dolama, K., see Stanislaus, A. (41)109
- Albanesi, G., see Moggi, P. (53)L1
- Alekseev, B.V., see Koltsov, N.I. (46)189
- Allgeier, J., see Lange, J.-P. (45)345
- Alouche, A., see Barrault, J. (58)255
- Alouche, A., see Barrault, J. (46)269

- Altomare, C.A., Koerner, G.S., Martins, E., Schubert, P.F., Suib, S.L. and Willis, W.S.
Vanadium interactions with treated silica aluminas (45)291
- Alvarez, F., see Guerin, M. (45)325
- Alvarez-Urriarte, J.I., see Gonzalez-Marcos, J.A. (60)1
- Amara, M., Bettahar, M. and Olivier, D.
Methanol synthesis on monovalent copper species stabilized on silica and zinc oxide (51)141
- Amara, M., Gengembre, L. and Olivier, D.
Preparation of monovalent copper by a single electron transfer step in the photoreduction of zinc oxide-supported copper catalysts (41)147
- Anderson, J.R.
Methane to higher hydrocarbons - a review (47)173
- Andersson, S.L.T., see Zhu, J. (53)251
- Andreev, A., see Vassileva, M. (49)125
- André, C., see Ito, T. (43)L5
- Angelov, S., see Terlecki-Baricevic, A. (47)141
- Akawa, H., see Takeuchi, K. (48)149
- Aramendia, M.A., Borau, V., Jimenez, C., Marinas, J.M., Scmper, M.E. and Urbano, P.
Reduction of acetophenone with palladium catalysts by hydrogen transfer and with molecular hydrogen
- Borau, V., see Aramendia, M.A. (43)41
- Arata, K., and Hino, M.
Solid catalyst treated with anion: XVIII. Benzoylation of toluene with benzoyl chloride and benzoic anhydride catalysed by solid superacid of sulfate-supported alumina (59)197
- Arata, K., see Matsubashi, H. (59)205
- Armor, J.N.
Catalysis with permselective inorganic membranes - a review (49)1
- Armstrong, R.S., Bell, T., Chaffee, A.L., Chin, V.W.L., Loeh, H.J., Lucchese, A.B.J., Masters, A.F. and Williams, M.A.
Supported metal cluster compounds as precursors of Fischer-Tropsch catalysts (47)239
- Arnaud, Y., see Hoang, C. (46)281
- Arnold, E.W., III and Sundaresan, S.
Effect of water vapor on the activity and selectivity characteristics of a vanadium phosphate catalyst towards butane oxidation (41)225
- Arnold, P., Van Oers, E.M., De Beer, V.H.J., Moulijn, J.A. and Prins, R.
Thiophene hydrodesulphurization activity of alumina-, silica- and carbon-supported sulphided Re_2O_7 catalysts (48)241
- Arroyo, V., see Viniegra, M. (44)L1
- Artamonov, E.V., see Startsev, A.N. (45)183
- Asakawa, H., see Shimokawabe, M. (59)45
- Asami, K., see Yagita, H. (53)L5
- Asami, K., see Fujimoto, K. (50)223
- Asua, J.M., see Aguinaga, A. (51)1
- Atanasova, P. and Halache, T.
Influence of phosphorous concentration on the type and structure of the compounds formed in the oxide form of phosphorus-nickel-molybdenum/alumina catalysts for hydrodesulphurization (48)295
- Augustine, S.M., see Tsang, C.M. (46)45
- Auroux, A., see Briot, P. (59)141
- Auroux, A., see Gelin, P. (46)227
- Avila, P., see Blanco, J. (55)151
- Axelsson, I.-A., Lowendahl, L. and Otterstedt, J.-E.
Hydrothermal stability of silica as a support for platinum in an oxidation catalyst (44)251
- Axon, S.A. and Klinowski, J.
Quantitative monitoring of the crystallization of zeolite ZSM-5/silicalite in non-alkaline media (56)L9
- Ay, C.A., see Wang, I. (54)257
- Ayame, A. and Imanishi, K.
Alkylation of benzene with 2-chloropropane on chlorine-treated alumina (56)73
- Ayame, A., Sawada, G., Sato, H., Zhang, G., Ohta, T. and Izumizawa, T.
Characterization of chlorine-treated alumina surfaces (48)25
- Azhar, M., see Primet, M. (58)241

B

- B-Son Bredenberg, J., see Vuori, A. (52)41
- B-Son Bredenberg, J., see Toropainen, P. (52)57
- Bulow, C., see Volter, J. (42)15
- Baba, T., Nakano, K., Nishiyama, S., Tsuruya, S. and Masai, M.
Highly selective dimerization of ethylene over Pd-Mg-X zeolite and determination of its active sites by infrared spectroscopy (52)81
- Baba, T. and Ono, Y.
Enhancing effect of hydrogen on the catalytic activity of trisilver dodecatungstophosphate for the isomerization of 1-butene (55)301
- Babcock, K.W., Hiltzik, L., Ernst, W.R. and Carruthers, J.D.

- Thiophene hydrodesulfurization on fresh, spent, and treated catalysts (51)295
- Backhaus, K.O., Burkhardt, I., Fichtner, H., Illigen, U., Richter-Mendau, J., Scheve, J. and Schulz, I.W. Influence of the pretreatment of cracking catalysts activity and selectivity (47)131
- Baerns, M., see Do, N.-T. (45)9
- Baerns, M., see Baranski, A. (54)111
- Baerns, M., see Do, N.-T. (45)1
- Bahamonde, A., see Blanco, J. (55)151
- Baiker, A., see Kijenski, J. (53)107
- Baiker, A., see Gasser, D. (48)279
- Bailey, K.M., Campbell, T.K. and Falconer, J.L. Potassium promotion of Ni/Al₂O₃ catalyst (54)159
- Bak Hansen, J.H., see Rostrup-Nielsen, J.R. (43)283
- Baker, J.E., Burch, R. and Golunski, S.E. Synthesis of higher alcohols over copper/cobalt catalysts. Influence of preparative procedures on the activity and selectivity of Cu/Co/Zn/Al mixed oxide catalysts (53)279
- Baker, J.M., Bessell, S. and Seddon, D. Conversion of propene into gasoline and middle distillate using alkalised ZSM-5 zeolite catalysts (45)L1
- Balakrishnan, I., see Grobet, P.J. (56)L21
- Baldwin, T.R., Burch, R., Crabb, E.M., Squire, G.D. and Tsang, S.C. Oxidative coupling of methane over chloride catalysts (56)219
- Baltrus, J.P., Diehl, J.R., McDonald, M.A. and Zarochak, M.F. Effects of pretreatment on the surface properties of iron Fischer-Tropsch catalysts (48)199
- Banerjee, A.A., and Mukesh, D. Heterogeneous catalytic transfer hydrogenation reactions of 4-nitrophenylamine (59)1
- Banerji, S.N., see Tiwari, K.K. (45)39
- Baranski, A., Hajduk, J., Hess, D. and Baerns, M. Effect of pressure on the reduction rate of fused iron catalyst for ammonia synthesis (54)111
- Baratti, R., see Cao, G. (41)301
- Barboux, Y., Elamrani, A.R., Payen, E., Gengembre, L., Bonnelle, J.P. and Grzybowski, B. Silica supported molybdena catalysts. Characterization and methane oxidation (44)117
- Barbier, J., see Duprez, D. (49)75
- Barbier, J., see Duprez, D. (49)67
- Barbier, J., see Dumas, J.M. (47)L9
- Barbier, J., see Lamy-Pitara, E. (44)261
- Baronetti, G.T., see De Miguel, S.R. (60)47
- Baronetti, G.T., see De Miguel, S.R. (45)61
- Barraut, J. and Alouche, A. Isotopic exchange measurements of the rate of interconversion of carbon monoxide and carbon dioxide over nickel supported on rare earth oxides (58)255
- Barraut, J., Alouche, A., Paul-Boncour, V., Hilaire, L. and Percheron-Guegan, A. Influence of the support on the catalytic properties of nickel/ceria in carbon monoxide and benzene hydrogenation (46)269
- Barthelemy, C., see Blanco, J. (55)151
- Bartley, G.J.J. and Burch, R. Support and morphological effects in the synthesis of methanol over Cu/ZnO, Cu/ZrO₂ and Cu/SiO₂ catalysts (43)141
- Bartley, G.J.J., Burch, R. and Chappell, R.J. Investigation of the dispersion of supported copper catalysts by oxygen adsorption and nitrous oxide decomposition (43)91
- Bates, A., see Martin, G.A. (47)287
- Bechadergue-Labiche, C., Canesson, P. and Blanchard, M. Selective transformation of methanol into light olefins on metallic catalysts (42)299
- Beck, H.P., see Wiesgickl, G. (59)L1
- Bedford, M., Purves, J.H., Self, V.A. and Sermon, P.A. Use of catalytic detector in temperature-programmed reduction (58)147
- Beeckman, J.W., see Pereira, C.J. (42)47
- Beek, A. van der, see Heveling, J. (42)325
- Beer, V.H.J. de, see Ramselaar, W.L.T.M. (54)217
- Behrsing, T., Jaeger, H. and Sanders, J.V. Coke deposits on H-ZSM-5 zeolite (54)289
- Behrsing, T., Jaeger, H. and Mole, T. Hydroisomerization of branched-chain alkenes over Pt/H-ZSM-5 zeolite (47)67
- Belapurkar, A.D., Gupta, N.M. and Iyer, R.M. PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. I. Preparation and characterization (43)1
- Bellotto, M., see Cristiani, C. (57)253
- Beltrami, J.N., see Bickle, G.M. (47)59
- Ben Taarit, A., see Gelin, P. (46)227
- Bensitel, M., see George, Z.M. (43)167
- Beran, S., see Kapustin, G.I. (42)239
- Berg-Slot, J.J., see Schaper, H. (54)79
- Bernal, S., see Kieffer, R. (42)77
- Berthier, Y., see Pradier, C.-M. (43)177
- Bessell, S., see Baker, J.M. (45)L1
- Bettahar, M., see Amara, M. (51)141
- Bettahar, M.M., see Denise, B. (48)365
- Bezouhanova, Cv., Dimitrov, Chr. Nenova, V. and Lechert, H.

- Selective alkylation of alkylbenzenes in the presence of HZSM-5 zeolites (49)101
- Bhaskar, G.V., see Bickle, G.M. (47)59
- Bhattacharjee, A., see Tiwari, K.K. (45)39
- Bhattacharya, R.N., see Tiwari, K.K. (45)39
- Bianchi, D., see Levesque, P. (57)31
- Bickle, G.M., Bhaskar, G.V., Do, D.D. and Beltrami, J.N.
Examination of the behaviour of Pt/Al₂O₃ and Pt-Re/Al₂O₃ reforming catalyst in the presence of ZSM-5 zeolite (47)59
- Biswas, J. and Maxwell, I.E.
Octane enhancement in fluid catalytic cracking. I. Role of ZSM-5 addition and reactor temperature (58)1
- Biswas, J. and Maxwell, I.E.
Octane enhancement in fluid catalytic cracking. II. Operation in the overcracking regime (58)19
- Bittar, A., see Coq, B. (60)33
- Bittar, A., see Coq, B. (59)103
- Blackmond, D.G., see Ciocco, M.V. (44)105
- Blanchard, M., Wendlinger, L. and Canesson, P.
Heterogeneous catalytic reactions of chlorofluorocarbons (59)123
- Blanchard, M., see Bechadargue-Labiche, C. (42)299
- Blanco, A., Campelo, J.M., Garcia, A., Luna, D., Marin, J.M. and Moreno, M.S.
Aluminium phosphate-zirconia catalysts. I. Structure, texture, acid-base properties and catalytic activity in cyclohexene isomerization of catalysts obtained with propylene oxide (53)135
- Blanco, J., Avila, P., Barthelemy, C., Bahamonde, A., Odriozola, J.A., Garcia de la Banda, J.F. and Heine-mann, H.
Influence of phosphorus in vanadium-containing catalysts for NO_x removal (55)151
- Blaser, H.U., Jalett, H.P., Monti, D.M. and Wehrli, J.T.
Enantioselective hydrogenation of α -keto esters: Temperature-programmed reduction study of liquid-phase Pt/Al₂O₃ hydrogenation catalysts (52)19
- Bode, D., see Oelderik, J.M. (47)1
- Bodnariuk, P., see Aduriz, H.R. (58)227
- Boelee, J.J., Custers, J.M.G. and Van der Wiele, K.
Influence of reaction conditions on the effect of co-feeding ethene in the Fischer-Tropsch synthesis on a fused-iron catalyst in the liquid phase (53)1
- Bogay, I., see Schay, Z. (51)33
- Bogay, I., see Schay, Z. (51)49
- Boitiaux, J.P., Cosyns, J. and Robert, E.
Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts II: Influence of various compounds containing phosphorus, oxygen, sulphur and chloride on the catalytic performance of platinum catalyst (49)235
- Boitiaux, J.P., Cosyns, J. and Robert, E.
Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts. I: Influence of nitrogen-containing compounds (49)219
- Bond, G.C. and Flamerz, S.
Structure and reactivity of titania-supported oxides: IV. Characterisation of dried vanadia/titania catalyst precursors (46)89
- Bond, G.C., Garin, F. and Maire, G.
Characterization of the standard platinum/silica catalyst EUROPT-1. VI. Catalytic properties (41)313
- Bongaarts, J.E., see Meima, G.R. (44)133
- Bonnaudet, S., see Mimoun, H. (58)269
- Bonnelle, J.P., see Barbaux, Y. (44)117
- Bonnier, J.M., Damon, J.P. and Masson, J.
New approach to skeletal nickel catalysts. Catalytic properties of the nickel-chromium system (42)285
- Bonnier, J.M., see Koscielski, T. (49)91
- Bonnier, J.M., Court, J., Wierzchowski, P.T. and Hamar-Thibault, S.
Unique bimetallic nickel-chromium and nickel-molybdenum catalysts for hydrogenation in the liquid phase (53)217
- Borg, F., see Holl Y. (46)57
- Boronin, A.I., see Ryndin, Yu.A. (54)277
- Boronin, A.I., see Ryndin, Yu. (42)131
- Bousquet, J., see Mercier Des Rochette, B. (58)35
- Bouyssieres, L., see Gil Llambias, F.J. (59)185
- Bowker, M.
Effects of sintering on the active site distribution on promoted catalysts (45)115
- Breyse, M., see Ramirez, J. (52)211
- Briot, P., Auroux, A., Jones, D. and Primet, M.
Effect of particle size and the reactivity of oxygen-adsorbed platinum supported on alumina (59)141
- Brito, J.L., see Laine, J. (53)81
- Brotas De Carvalho, M., see Pires, J. (53)273
- Brouwer, W.G.J., see Luys, M.J. (46)161
- Brown, J.R., see Wilson, M.F. (41)177
- Brown, S.J., Clutterbuck, L.M., Masters, A.F., Sachinidis, J.I. and Tregloan, P.A.
Kinetic and mechanistic studies of nickel-catalysed olefin oligomerization (48)1
- Brückman, K., see Centi, G. (46)197
- Brueva, T.R., see Kapustin, G.I. (42)239

Bruijn, N.A. de, see Korf, S.J. (58)131

Brynn Hibbert, D. and Campbell, R.H.

Flue gas desulphurisation: Catalytic removal of sulphur dioxide by carbon monoxide on sulphided $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$. I. Adsorption of sulphur dioxide, carbon monoxide and their mixtures (41)273

Brynn Hibbert, D. and Campbell, R.H.

Flue gas desulphurisation: Catalytic removal of sulphur dioxide by carbon monoxide on sulphided $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$. II. Reaction of sulphur dioxide and carbon monoxide in a flow system (41)289

Buffat, P.-A., see Prairie, M.R. (57)83

Bugli, G., see Marques de Cruz, G. (46)131

Bukhtiyarov, V.I., see Ryndin, Yu.A. (54)277

Bun, S., Nishiyama, S., Tsuryua, S. and Masai, M.

Ethanol conversion over ion-exchanged ZSM-5 zeolites (59)13

Burch, R., Squire, G.D. and Tsang, S.C.

Role of chlorine in improving selectivity in the oxidative coupling of methane to ethylene (46)69

Burch, R. and Chappell, R.J.

Support and additive effects in the synthesis of methanol over copper catalysts (45)131

Burch, R., Squire, G.D. and Tsang, S.C.

Comparative study of catalysts for the oxidative coupling of methane (43)105

Burch, R., see Baldwin, T.R. (56)219

Burch, R., see Baker, J.E. (53)279

Burch, R., see Bartley, G.J.J. (43)91

Burch, R., see Bartley, G.J.J. (43)141

Burggraaf, A.J., see Mercera, P.D.L. (57)127

Burkhardt, I., see Backhaus, K.O. (47)131

Burmistrov, V.A., see Startsev, A.N. (45)191

Bussiere, P., Duvault, J.L., Forissier, M., Foujols, D., Mirodatos, C. and Perrichon, V.

Relationship between the catalytic properties and surface composition of a polycrystalline Fe-Ni ribbon (58)219

Butt, J.B., see Tsang, C.M. (46)45

C

Caeiro, J., see Jacquinot, E. (60)101

Cai-Hong Yang, see Ding-Zhu Wang (59)75

Cambor, M.A., Corma, A., Martínez, A., Mocholí, F.A. and Pérez Pariente, J.

Catalytic cracking of gasoil: Benefits in activity and selectivity of small Y zeolite crystallites stabilized by a higher silicon-to-aluminium ratio by synthesis (55)65

Cameron, C.J., see Mimoun, H. (58)269

Campbell, I., see Ekstrom, A. (56)L29

Campbell, I., see Chaffee, A.L. (47)249

Campbell, R.H., see Brynn Hibbert, D. (41)273

Campbell, R.H., see Brynn Hibbert, D. (41)289

Campbell, T.K. and Falconer, J.L.

Carbon dioxide hydrogenation on potassium-promoted nickel catalysts (50)189

Campbell, T.K., see Bailey, K.M. (54)159

Campelo, J.M., see Blanco, A. (53)135

Canesson, P., see Blanchard, M. (59)123

Canesson, P., see Bechadargue-Labiche, C. (42)299

Cant, N.W., see Yong, Y.S. (48)37

Cant, N.W., see Lee, J.C. (57)215

Cant, N.W., see Maitra, A.M. (48)187

Cao, G., Viola, A., Baratti, R.,

Morbiddelli, M., Sanseverino, L. and Crucci, M.

Lumped kinetic model for propene-butene mixtures oligomerization on a supported phosphoric acid catalyst (41)301

Caro, J., see Volter, J. (42)15

Carruthers, J.D. and DiCamillo, D.J.

Pilot plant testing of hydrotreating catalysts: Influence of catalyst condition, bed loading and dilution (43)251

Carruthers, J.D., see Babcock, K.W. (51)295

Cartledge, S., see Addison, S.W. (45)307

Caruso, F., Jablonski, E.L., Grau, J.M. and Parera, J.M.

Crystallinity of coke on platinum-rhenium/alumina reforming catalyst during the commercial cycle (51)195

Casbas, F., Duprez, D. and Ollivier, J.

Catalytic hydrodesulphurization of terpenes (50)87

Castro, A.A., see Ruben de Miguel, S. (44)23

Castro, A.A., see De Miguel, S.R. (60)47

Castro, A.A., see De Miguel, S.R. (45)61

Centeno, A., see Delmon, B. (51)L21

Centi, G., Golinelli, G. and Trifiro, F.

Nature of the active sites of $(\text{VO})_2\text{P}_2\text{O}_7$ in the selective oxidation of n-butane. Evidence from doping experiments (48)13

Centi, G., Lopez Nieto, J., Iapalucci, C., Brückman, K. and Serwicka, E.M.

Selective oxidative of n-pentane on 12-molybdovanadophosphoric acids (46)197

Centi, G., see Grasselli, R.K. (57)149

Cerrella, G., see Agarars, H. (45)53

- Chaffee, A.L., Campbell, I. and Valentine, N.
Sulfur poisoning of Fischer-Tropsch synthesis catalysts in a fixed-bed reactor (47)249
- Chakrabarty, D.K., see Ramachandran, A. (42)229
- Chan, T.K. and Smith, K.J.
Oxidative coupling of methane over cobalt-magnesium and manganese-magnesium mixed oxide catalysts (60)13
- Chang, S.-H. see Huang, T.-J. (52)157
- Chang, V., see Laine, J. (44)11
- Chaoui, J., see Klvana, D. (42)121
- Chappell, R.J., see Burch, R. (45)131
- Chappell, R.J., see Bartley, G.J.J. (43)91
- Chary, K.V.R., see Nag, N.K. (41)165
- Chaumette, P., see Kiennemann, A. (59)165
- Chaumette, P., see Kiennemann, A. (53)197
- Chauvin, B., see Massiani, P. (42)105
- Chauvin, Y., Commereuc, D., Hugues, F. and Thivolle-Cazat, J.
Nickel-based heterogeneous catalysts for olefin oligomerization. I. Support and anion effects (42)205
- Chavarie, C., see Klvana, D. (42)121
- Chen, C.-T., see Tsai, T.C. (50)1
- Chen, M.-W., see Wang, I. (54)257
- Chen, N.Y. and Lucki, S.J.
Low-temperature hydrocarbon conversion over rare-earth-exchanged zeolite X catalyst (42)169
- Chen, Y.-W. and Wang, W.-J.
Effects of the addition of zeolites on ruthenium catalysts in carbon monoxide hydrogenation (49)45
- Chen, Y.-L., see Powell, B.R. (53)233
- Chen, Y.-W., see Wang, P.-J. (55)181
- Cheng, W.-C., see Pereira, C.J. (42)47
- Cherifi, O., see Denise, B. (48)365
- Christiansen, L.J., see Rostrup-Nielsen, J.R. (43)283
- Chuang, S.S.C., Pien, S.-I. and Narayanan, R.
C₂ oxygenate synthesis from CO hydrogenation on AgRh/SiO₂ (57)241
- Chuvilin, A.L., see Ryndin, Yu. (42)131
- Chuvilin, A.L., see Lisitsyn, A.V. (55)235
- Cid, R., see Gil Llambias, F.J. (59)185
- Ciocco, M.V. and Blackmond, D.G.
Support and alkali promotion effects on the surface chemistry of nickel/silica catalysts (44)105
- Claßen, B.S., Topsøe, H. and Morup, S.
Preparation and properties of small silica-supported iron catalyst particles. Influence of reduction procedure (48)327
- Climent, M.J., Corma, A., Garcia, H. and Primo, J.
Zeolites in organic reactions. Condensation of formaldehyde with benzene in the presence of HY zeolites (51)113
- Climent, M.J., see Corma, A. (59)333
- Climent, M.J., see Corma, A. (49)109
- Clutterbuck, L.M. see Brown, S.J. (48)1
- Coenen, J.W.E.
Characterization of the standard nickel/silica catalyst EuroNi-1. II. Chemical aspects: precipitation, reduction and chemical analysis (54)65
- Coenen, J.W.E.
Characterization of the standard nickel/silica catalyst EuroNi-1. I. Background, aims, organization and outline (54)59
- Cogen, J.M. and Maier, W.F.
Reaction selectivity as a test for catalysis on exposed metal (48)235
- Colen, G.C.M., van Duijn, G. and van Oosten, H.J.
Effect of pore diffusion on the triacylglycerol distribution of partially hydrogenated trioleylglycerol (43)339
- Collins, D.J., Lloyd, E.C. and Miranda, R.
Side reactions in quinoline hydrodenitrogenation (41)81
- Commereuc, D., see Chauvin, Y. (42)205
- Conway, S.J., Szanyi, J. and Lunsford, J.H.
Catalytic properties of lithium carbonate melts and related slurries for the oxidative dimerization of methane (56)149
- Cooper, M.E. and Frost, J.
New iron/nickel alloy catalyst for Fischer-Tropsch synthesis (57)L5
- Cooper, W.C., see Egiebor, N.O. (55)47
- Copperthwaite, R.G., see Hutchings, G.J. (43)133
- Coq, B., Bittar, A., Dutartre, R. and Figueras, F.
Influence of the precursor and the support on the catalytic properties of ruthenium for alkane hydrogenolysis (60)33
- Coq, B., Bittar, A. and Figueras, E.
Hydrogenolysis and isomerization of alkanes on Ru/Al₂O₃ catalysts of varying dispersions (59)103
- Coq, B., see Pardillos, J. (51)285
- Corma, A., Faraldos, M. and Mifsud, A.
Influence of the level of dealumination on the selective adsorption of olefins and paraffins and its implication on hydrogen transfer reactions during catalytic cracking on USY zeolites (47)123
- Corma, A., Fornes, V., Martin-Aranda, R.M., Garcia, H. and Primo, J.
Zeolites as base catalysts: Condensation of aldehydes with derivatives of malonic esters (59)237
- Corma, A., Climent, M.J., Garcia, H. and Primo, J.

- Formation and hydrolysis of acetals catalysed by acid faujasites (59)333
- Corma, A., Climent, M.J., Garcia, H. and Primo, J.
Design of synthetic zeolites as catalysts in organic reactions: Acylation of anisole by acyl chlorides or carboxylic acids over acid zeolites (49)109
- Corma, A., Fornes, V. and Rey, F.
Extraction of extra-framework aluminium in ultra-stable Y zeolites by $(\text{NH}_4)_2\text{SiF}_6$ treatments. I. Physicochemical characterization (59)267
- Corma, A., see Climent, M.J. (51)113
- Corma, A., see Cambor, M.A. (55)65
- Corma, A., see Fuentes, M. (47)363
- Corma, A., see Cruz, J.M. (50)287
- Corma, A., see Martens, J.A. (45)85
- Correa, J.A. Martinez, see De Miguel, S.R. (60)47
- Cosyns, J., see Boitiaux, J.P. (49)219
- Cosyns, J., see Boitiaux, J.P. (49)235
- Court, J.M., see Bonnier, J.M. (53)217
- Courtine, P., see Oudet, F. (50)79
- Courty, P., see Kiennemann, A. (53)197
- Courty, Ph., see Kiennemann, A. (59)165
- Crabb, E.M., see Baldwin, T.R. (56)219
- Craje, M.W.J., see Ramselaar, W.L.T.M. (54)217
- Cristiani, C., Bellotto, M., Forzatti, P. and Tronconi, E.
Synthesis of alcohols from carbon oxides and hydrogen. XVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn-Cr-O systems in the synthesis of alcohols from carbon monoxide and hydrogen (57)253
- Cruccu, M., see Cao, G. (41)301
- Cruz, J.M., Corma, A. and Fornes, V.
Framework and extra-framework aluminium distribution in $(\text{NH}_4)_2\text{F}_6\text{Si}$ -dealuminated Y zeolites. Relevance to cracking catalysts (50)287
- Cuevas, R., see Ramirez, J. (57)223
- Cui, J.-W., see Massoth, F.E. (58)199
- Cullinane, M.B., see Richardson, W.T. (48)159
- Custers, J.M.G., see Boelee, J.H. (53)1
- D**
- D'Aniello Jr., M.J., see Kim, S. (56)45
- D'Aniello Jr., M.J., see Kim, S. (56)23
- Da Silva, P.N., see Frety, R. (57)99
- Da Silva, P.N., see Frety, R. (58)175
- Da Silva, P.N., Guenin, M., Leclercq, C. and Frety, R.
Metallic area of supported iridium catalysts (54)203
- Dabbagh, H.A., see Tau, L.M. (56)95
- Daito, N., see Inui, T. (51)155
- Dalla Lana, I.G., see Przystajko, W. (59)129
- Dalmon, J.A., see Hoang, C. (46)281
- Damon, J.P., see Hamar-Thibault, S. (56)57
- Damon, J.P., see Koscielski, T. (49)91
- Damon, J.P., see Bonnier, J.M. (42)285
- Damyanova, S., Spojakina, A.A. and Shopov, D.M.
Study of low-percentage alumina-supported nickel-molybdenum catalysts by ESR spectroscopy and magnetic measurements (48)177
- Damyanova, S., see Spojakina, A. (56)163
- Dancheva, S., see Vassileva, M. (49)125
- Danilyuk, A.F., see Lisitsyn, A.V. (55)235
- Dao, L.H. see Levesque, P. (53)157
- Das, D.P., see Sengupta, G. (55)165
- Davis, B.H., see Adkins, B.D. (44)199
- Davis, B.H., see Tau, L.M. (56)95
- Davis, B.H., see Tau, L.-M. (53)263
- De Beer, V.H.J., see Ramselaar, W.L.T.M. (54)217
- De Beer, V.H.J., see Ramselaar, W.L.T.M. (51)263
- De Beer, V.H.J., see Van Doorn, J. (49)319
- De Beer, V.H.J., see Ramselaar, W.L.T.M. (42)153
- De Beer, V.H.J., see Arnold, P. (48)241
- De Beer, V.H.J., see Van Doorn, J. (48)253
- De Bruijn, N.A., see Korf, S.J. (58)131
- De Goldwasser, M.R., see Pietri De Garcia, E. (50)55
- De La Cal, J.C., see Aguinaga, A. (51)1
- De Las Pozas, C., see Fuentes, M. (47)363
- De Miguel, S.R., Baronetti, G.T., Castro, A.A. and Scelza, O.A.
Platinum-tin/alumina catalyst: Modification of the metallic phase after successive oxidation-reduction cycles (45)61
- De Miguel, S.R., Martinez Correa, J.A., Baronetti, G.T., Castro, A.A. and Scelza, O.A.
Influence of the reduction temperature on the characteristics of the metallic phase of Pt-Ge/Al₂O₃ catalysts (60)47
- De Miguel, S.R., Scelza, O.A. and Castro, A.A.
Nature of the metallic phase in platinum-germanium/alumina catalysts (44)23
- De Pender, M., see Heveling, J. (42)325
- De Wind, M., Plantenga, F.L., Heinerman, J.J.L. and Homan Free, H.W.
Upflow versus downflow testing of hydrotreating catalysts (43)237
- Delahay, G. and Duprez, D.
Effect of sulphur on the coking of rhodium in the steam reforming of 1-methylnaphthalene (53)95

- Delannay, F., see Prada Silvy, R. (46)113
- Delcour, K., see Meima, G.R. (44)133
- Delgass, W.N., see Sajkowski, D.J. (51)255
- Delmon, B., Karroua, M., Centeno, A., Matralis, H.K. and Grange, P.
Synergy in hydrosulfurization and hydrogenation on mechanical mixtures of cobalt sulfide on carbon and MoS₂ on alumina (51)L21
- Delmon, B., see Qiu, F.-Y. (47)113
- Delmon, B., see Qiu, F.-Y. (51)235
- Delmon, B., see Prada Silvy, R. (46)113
- Delmon, P.B., M. Karroua and P. Grange
Existence of synergy between "CoMoS" and Co₉S₈: New proof of remote control in hydrosulfurization (50)L5
- Den Hartog, A.J., see Rek, P.J.M. (46)213
- Denise, B., Cherifi, O., Bettahar, M.M. and Sneed, R.P.A.
Supported copper catalysts prepared from copper(II) formate. Hydrogenation of carbon dioxide containing feedstocks (48)365
- Dennehy, M., see Aduriz, H.R. (58)227
- Derks, L.J.G.M., see Meima, G.R. (44)133
- Derksen, J.W.H.C., see Korf, S.J. (59)291
- Derouane, E., see Pires, J. (53)273
- Derouane, E., see Lemos, F. (49)175
- Derouane, E.G. and Nagy, J.B.
Reply to "comments on diffusion of alkanes in molecular sieves: Evidence for confinement effects" (52)169
- Derouane, E.G., Maistriau, L., Gabelica, Z., Tuel, A., Nagy, J.B. and Von Ballmoos, R.
Synthesis and characterization of the very large pore molecular sieve MCM-9 (51)L13
- Derouane, E.G. and Vanderveken, D.J.
Structural recognition and preorganization in zeolite catalysis: Direct aromatization of n-hexane on zeolite L-based catalysts (45)L15
- Derouane, E.G., see Dumont, N. (54)L1
- Derouane, E.G., see Ito, T. (43)L5
- De Wind, M., Plantenga, F.L., Heinerman, J.J.L. and Homan Free, H.W.
Upflow versus downflow testing of hydrotreating catalysts (43)239
- Diagne, C., Idress, H., Pepin, I., Hindermann, J.P. and Kiennemann, A.
Temperature-programmed desorption studies on Pd/CeO₂ after methanol and formic acid adsorption and carbon monoxide-hydrogen reaction (50)43
- Diagne, C., Idress, H., Hindermann, J.P. and Kiennemann, A.
Promoting effects of lithium on Pd/CeO₂ catalysts in carbon monoxide-hydrogen reactions: Chemical trapping and temperature-programmed desorption studies (51)165
- Diagne, C., see Kiennemann, A. (53)197
- Diaz, G., see Ramirez, J. (52)211
- DiCamillo, D.J., see Carruthers, J.D. (43)251
- Diehl, J.R., see Baltrus, J.P. (48)199
- Dimitrov, Chr., see Bezouhanova, Cv. (49)101
- Ding-Zhu Wang, Xue-Dong Lu., Xiu-Yun Dou, Wen-Ben Li and Cai-Hong Yang
Effect of acidity of HZSM-5 type zeolite on conversion of alkenes and alkanes to gasoline and aromatics (59)75
- Do, D.D., see Bickle, G.M. (47)59
- Do, N.T. and Baerns, M.
Effect of support material on the adsorption structures of furan and maleic anhydride on the surface of V₂O₅/P₂O₅ catalysts. II. Results of in situ infrared spectroscopic studies (45)9
- Do, N.T. and Baerns, M.
Effect of support material on the catalytic performance of V₂O₅/P₂O₅ catalysts for the selective oxidation of but-1-ene and furan to maleic anhydride and its consecutive nonselective oxidation (45)1
- Doesburg, E.B.M., see Mercera, P.D.L. (57)127
- Doi, T., see Matsuura, I. (47)295
- Donnelly, T.J. and Satterfield, C.N.
Performance testing with a gas-liquid-solid system in a mechanically stirred reactor: the Fischer-Tropsch synthesis (56)231
- Donnelly, T.J. and Satterfield, C.N.
Product distributions of the Fischer-Tropsch synthesis on precipitated iron catalysts (52)93
- Doorn, J. van, see Van Doorn, J. (49)319
- Dossi, C., Fusi, A., Psaro, R. and Zanderighi, G.M.
Temperature-programmed decomposition as a probe for the surface reactivity of heterogeneous catalysts. Model system Os₃(CO)₁₂ supported on silica and alumina (46)145
- Doyemet, J.Y., see Gnep, N.S. (43)155
- Driscoll, S.A., see Ozkan, U. (58)305
- Ducarme, V., see Martin, G.A. (47)287
- Dufresne, L., see Le Van Mao, R. (52)1
- Duijn, G. van, see Colen, G.C.M. (43)339
- Dumas, J.M., Geron, C., Kribbi, A. and Barbier, J.
Preparation of supported copper catalysts reduction of copper-alumina catalysts (47)L9
- Dumont, N., Ito, T. and Derouane, E.G.
¹²⁹Xe-NMR investigation of SAPO-37 (54)L1
- Duprez, D., Hadj-Aissa and Barbier, J.

Effect of steam on the coking of platinum catalysts.
II. Kinetics (49)75

Duprez, D., Hadj-Aissa, M. and Barbier, J.

Effect of steam on the coking of platinum catalysts.

I. Inhibiting effect of steam at low partial pressure
for the dehydrogenation of cyclopentane and the
coking reaction (49)67

Duprez, D., see Delahay, G. (53)95

Duprez, D., see Casbas, F. (50)87

Durga Kumari, V., see Venkat Rao, V. (49)165

Durupt, M.C., see Perrichon, V. (42)217

Dutartre, R., see Coq, B. (60)33

Dutta, S., see Sengupta, G. (55)165

Duvault, J.L., see Bussiére, P. (58)219

E

Echevskii, G.V., Ione, K.G., Nosyreva, G.N. and
Litvak, G.S.

Effect of the temperature regime of methanol con-
version to hydrocarbons on coking of zeolite cata-
lysts and their regeneration

Ione, K.G., see Echevskii, G.V. (43)85

Egiebor, N.O., Gray, M.R.

¹³C-NMR Characterization of organic residues on
spent hydroprocessing, hydrocracking and demetal-
lization catalysts (55)81

Egiebor, N.O., Cooper, W.C. and Wojciechowski,
B.W.

Synthesis of motor fuels from HY-zeolite supported
Fischer-Tropsch iron catalysts (55)47

Einicke, W.-D., see Reschetilowski, W. (56)L15

Ekstrom, A., Lapszewicz, J.A. and Campbell, I.

Origin of the low limits in the higher hydrocarbon
yields in the oxidative coupling reaction of methane
(56)L29

El Azhar, M., see Primet, M. (59)153

El Masry, H.

= Reply to: "Comments on Claus Reaction: Effect
of forced feed composition cycling" (letter to the
Editor) (50)307

El-Nabarawy, T., see El-Shobaky, G.A. (52)33

El-Shobaky, G.A., El-Nabarawy, T. and Fagal, G.A.

Effect of sodium oxide-doping on surface and cata-
lytic properties of CuO/Al₂O₃ solids (52)33

Elamrani, A.R., see Barbaux, Y. (44)117

Elberse, P.A., see Van der Griet, C.J.G. (59)275

Eliyas, A., Petrov, L. and Shopov, D.

Ethylene oxide oxidation over a supported silver
catalyst. II. Kinetics of inhibited oxidation (41)39

Eliyas, A., see Ivanova, P. (53)41

Eliyas, A., see Petrov, L. (41)23

Ellestad, O.H., see Mostad, H.B. (58)105

Emig, G., see Wiesgickl, G. (59)L1

Engelhard, P.A., see Holl Y. (46)57

Engels, S., Lausch, H., Peplinski, B., Wilde, M., Mörke,
W. and Kraak, P.

The state of metallic phase in alumina-supported
platinum-chromium catalysts (55)93

Engler, B., Koberstein, E. and Schubert, P.

Automotive exhaust gas catalysts: Surface structure
and activity (48)71

Ernst, S., Weitkamp, J., Martens, J.A. and Jacobs, P.A.
Synthesis and shape-selective properties of ZSM-22
(48)137

Ernst, W.R., see Babcock, K.W. (51)295

Escudey, M., see Gil Llambias, F.J. (59)185

Espinos, J.P., see Fernández, A. (57)191

Esquivel, N., see Fierro, J.L.G. (48)353

Esquivel, N., see Lopez Cordero, R. (48)341

Evaldsson, L., Löwendahl, L. and Otterstedt, J.-E.

Fibrillar alumina as a wash-coat on monoliths in the
catalytic oxidation of xylene (55)123

F

Fagal, G.A., see El-Shobaky, G.A. (52)33

Fahim, M., see Marafi, M. (47)83

Fahlke, B., see Martin, A. (57)203

Fahlke, M., see Volter, J. (42)15

Fajula, F., see Massiani, P. (42)105

Falconer, J.L., see Bailey, K.M. (54)159

Fan, C., Wainwright, M.S., Trimm, D.L. and Hoodless,
I.M.

Stability of passivated Raney copper catalysts dur-
ing reduction before use (54)53

Fan, C., see Fu, Y. (55)11

Faraldos, M., see Corma, A. (47)123

Fedotov, V.Kh., see Kostov, N.I. (53)89

Fernandez, A., Munuera, G., González-Elipe, A.R.,
Espinós, J.P., Herrmann, J.-M., Pichat, P. and Le-
clercq, C.

Photoassisted deposition of rhodium on plati-
num/titania samples as a method of preparing bime-
tallic catalysts (57)191

Ferrer, Z., see Laine, J. (44)11

Fichtner, H., see Backhaus, K.O. (47)131

- Fiedorow, R., see Przysajko, W. (59)129
- Fierro, J.-L.G., see Ramirez de la Piscina (49)259
- Fierro, J.-L.G., see Homs, N. (59)249
- Fierro, J.L.G., Lopez Agudo, A., Esquivel, N. and Lopez Cordero, R.
Effect of phosphorus on molybdenum-based hydro-treating catalysts. II. Hydrodesulphurization activity and characterization of the sulphided-state of P-Mo/Al₂O₃ systems (48)353
- Fierro, J.L.G., see Ramirez, J. (57)223
- Fierro, J.L.G., see López Cordero, R. (48)341
- Fierro, J.L.G., see López Cordero, R. (56)197
- Figoli, N.S., see Querini, C.A. (52)249
- Figoli, N.S., see Querini, C.A. (53)53
- Figoli, N.S., see Parera, J.M. (44)L1
- Figueras, E., see Coq, B. (59)103
- Figueras, F., see Coq, B. (60)33
- Figueras, F., see Massiani, P. (42)105
- Figueras, F., see Pardillos, J. (51)285
- Fischbacher, M., see Kramer, R. (42)337
- Flaconer, J.L., see Campbell, T.K. (50)189
- Flamerz, S., see Bond, G.C. (46)89
- Fleisde, T.H., see Sajkowski, D.J. (51)255
- Foger, K. and Jaeger, H.
Redispersion of Pt-zeolite catalysts with chlorine (56)137
- Folgado, M.A., see Mallat, T. (53)29
- Forissier, M., see Bussiere, P. (58)219
- Fornes, F., see Cruz, J.M. (50)287
- Fornes, V., see Corma, A. (59)237
- Fornes, V., see Corma, A. (59)267
- Forzatti, P., see Cristiani, C. (57)253
- Fouche, V., Magnoux, P. and Guisnet, M.
Coking, ageing and regeneration of zeolites. XI. Coke formation and deactivation of Pt-ultrastable zeolite HY and PtH-mordenite catalysts during hydrogenation of benzene (58)189
- Foujols, D., see Bussiere, P. (58)219
- Fraissard, J., see Ito, T. (43)L5
- Frank, A.S., see Richardson, W.T. (48)159
- Free, H.W. Homan, see De Wind, M. (43)237
- Frety, R., Da Silva, P.N. and Guenin, M.
Supported iridium catalysts. Comparison between resistance to sulphur poisoning and hydrodesulphurization properties (57)99
- Frety, R., Da Silva, P.N. and Guenin, M.
Study of supported iridium catalysts by hydrogen-oxygen titrations. Influence of the support (58)175
- Frety, R., see Primet, M. (59)153
- Frety, R., see Da Silva, P.N. (54)203
- Freude, D., see Reschetilowski, W. (56)L15
- Frias, P., see Laine, J. (44)11
- Frost, J., see Cooper, M.E. (57)L5
- Fu, Y., Tang, X., Huang, Z. and Fan, C.
Valency and adsorption characteristics of a sulphided MoO₃/γ-Al₂O₃ methanation catalyst (55)11
- Fuentes, M., Magraner, J., De Las Pozas, C., Roque-Malherbe, R., Pérez Pariente, J. and Corma, A.
Cyclization of citronellal to isopulegol by zeolite catalysis (47)367
- Fuentes, S., see Ramirez, J. (52)211
- Fujikawa, K., Hayashi, A., Tanaka, H., Kanazuka, T., Kanno, T. and Koda, T.
Catalytic gasification of carbon: Method for the determination of the activity of alkali metal catalysts in the gasification of highly pure amorphous and graphitic carbons with steam (50)199
- Fujimoto, K., Hashimoto, S., Asami, K., Omata, K. and Tominaga H.
Selective oxidative coupling of methane over supported alkaline earth metal halide catalysts (50)223
- Fujimoto, K., see Yagita, H. (53)15
- Fujitana, Y., see Shinjoh, H. (49)195
- Fujitani, Y., see Muraki, H. (47)75
- Fujitani, Y., see Muraki, H. (48)93
- Fukuoka, A., Rao, L.-F., Kosugi, N., Kuroda, H. and Ichikawa, M.
Selective hydroformylation of ethene and propene catalysed on NaY zeolite-entrapped Rh₆ and bimetallic RhFe clusters and their structural characterization by extended X-ray absorption fine structure and Fourier transform infrared spectroscopy (50)295
- Fukushima, T., see Osada, Y. (59)59
- Fung, D.P.C., see Hunter, N.R. (57)45
- Furimsky, E.
Effect of oxygen concentration on temperature runaway during regeneration of hydrotreating catalyst (44)189
- Fusi, A., see Dossi, C. (46)145

G

- Gunschel, H., see Martin, A. (50)149
- Gabelica, Z., see Ito, T. (43)L5
- Gabelica, Z., see Derouane, E.G. (51)L13
- Gallardo, J., see Laine, J. (53)81
- Gallezot, P., see Pitchon, V. (47)353

- Gancedo, J.-R., see Homs, N. (59)249
- Gao Zi, Tang Yi and Zhu Yugin
Effect of dealumination defects on the properties of zeolite Y (56)83
- Garcia, A., see Blanco, A. (53)135
- Garcia, C.L. and Resasco, D.E.
Effects of the support and the addition of a second promoter on potassium chloride-copper(II) chloride catalysts used in the oxychlorination of methane (46)251
- Garcia de la Banda, J.F., see Blanco, J. (55)151
- Garcia, H., see Climent, M.J. (51)113
- Garcia, H., see Corma, A. (59)237
- Garcia, H., see Corma, A. (49)109
- Garin, F., see Holl Y. (46)57
- Garin, F., see Bond, G.C. (41)313
- Gasser, D. and Baiker, A.
Hydrogenation of carbon dioxide over copper-zirconia catalysts prepared by in-situ activation of amorphous copper-zirconium alloy (48)279
- Gavalas, G.R., see Nam, S.W. (55)193
- Gelin, P., Auroux, A., Ben Taarit, Y. and Gravelle, P.C.
Infrared and calorimetric studies of the adsorption of carbon monoxide on zeolite-supported iridium catalysts (46)227
- Gengembre, L., see Barbaux, Y. (44)117
- Gengembre, L., see Amara, M. (41)147
- Gennari, U., Kramer, R. and Gruber, H.L.
Hydrogenolysis of methyltetrahydrofuran on platinum. II. Effects of self-poisoning and evaluation of structure sensitivity (44)239
- George, Z.M., Bensitel, M., Lion, M., Saur, O. and Lavalley, J.C.
Effect of Na^+ on sulphation and related reactions over a commercial Claus alumina catalyst (43)167
- Gerkema, E., see Ramselaar, W.L.T.M. (54)217
- Gerkema, E., see Ramselaar, W.L.T.M. (51)263
- Geron, C., see Dumas, J.M. (47)L9
- Gesser, H.D., see Hunter, N.R. (57)45
- Geus, J.W., see Van der Grift, C.J.G. (59)275
- Geus, J.W., see Meima, G.R. (44)133
- Geus, J.W. see Van der Grift, C.J.G. (60)181
- Ghassemi, M.R., see Acharya, D.R. (58)53
- Giannetto, G., see Guerin, M. (45)325
- Gierman, H.
Design of laboratory hydrotreating reactors scaling down of trickle-flow reactors (43)273
- Gigola, C.E., see Aduiz, H.R. (58)227
- Gil Llambias, F.J., Salvatierra, J., Bouyssieres, L., Escudey, M. and Cid, R.
Hydrosulfurization activity of WO_3/γ -alumina prepared by the equilibrium adsorption method (59)185
- Gil Llambias, F.J., see López Cordero, R. (56)197
- Giménez, J. and Cervera-March, S.
Catalytic activity of sulphonated styrene-divinylbenzene resins (48)307
- Glasz, W.C., see Van Hardeveld, R. (43)301
- Gnep, N.S., Doyemet, J.Y., Seco, A.M., Ramoa Ribeiro, F. and Guisnet, M.
Conversion of light alkanes to aromatic hydrocarbons. II. Role of gallium species in propane transformation on GaHZSM5 catalysts (43)155
- Gol'denberg, G.I., see Ovsyannikova, I.A. (55)75
- Golinelli, G., see Centi, G. (48)13
- Golovin, A.V., see Lisitsyn, A.S. (55)235
- Golunski, S.E. and Jackson, D.
Antimony oxides: A guide to phase changes during catalyst preparation (48)123
- Golunski, S.E., see Baker, J.E. (53)279
- Gomez, R., see Viniegra, M. (44)L1
- Gonzalez-Elipe, A.R., see Fernández, A. (57)191
- Gonzalez-Marcos, J.A., Alvarez-Uriarte, J.I., Gutierrez-Ortiz, J.I., Aguayo, A.T. and Gonzalez-Velasco, J.R.
Adsorption studies of different reagents on supported palladium catalysts (60)1
- Gonzalez-Velasco, J.R. see Gonzalez-Marcos, J.A. (60)1
- Goodman, J.P., see Adkins, B.D. (44)199
- Gorte, R.J., see Kofke, T.J.G. (54)177
- Gosling, K., see Lawrence, D.J. (43)213
- Gotoh, H., see Suzuki, T. (50)15
- Gotoh, M., see Hidaka, S. (43)57
- Gottschalk, F.M. and Hutchings, G.J.
Manganese oxide water-gas shift catalysts. Initial optimization studies (51)127
- Grabowska, H., Kaczmarszyk, W. and Wrzyszczyk, J.
Synthesis of 2,6-xyleneol by alkylation of phenol with methanol (47)347
- Gracia, M., see Homs, N. (59)249
- Grange, P., see Delmon, B. (51)L21
- Grange, P., see Delmon, B. (50)L7
- Grange, P., see Prada Silvy, R. (46)113
- Grasselli, R.K., Centi, G. and Trifiro', F.
Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts - a review (57)149
- Grau, J.M., see Caruso, F. (51)195
- Gravelle, P.C., see Gelin, P. (46)227
- Gray, M.R., see Egiebor, N.O. (55)81
- Grbic, B., see Terlecki-Baricevic, A. (47)141

Grobet, P.J., Martens, J.A., Balakrishnan, I., Mertens, M. and Jacobs, P.A.

The very large pore molecular sieve VPI-5: an aluminophosphate-hydrate! (56)L21

Grosman, J., see Holl Y. (46)57

Gruber, H.L., see Gennari, U. (44)239

Gruber, H.L., see Kramer, R. (42)337

Grzybowski, B., see Barbaux, Y. (44)117

Guczi, L., see Lietz, G. (45)71

Guczi, L., see Schay, Z. (51)49

Guczi, L., see Schay, Z. (51)33

Gueguen, C., see Mercier Des Rochettes, B. (58)35

Gueguen, C., see Massiani, P. (42)105

Guenin, M., see Primet, M. (59)153

Guenin, M., see Frety, R. (57)99

Guenin, M., see Frety, R. (58)175

Guenin, M., see Primet, M. (58)241

Guenin, M., see Da Silva, P.N. (54)203

Guerin, M., Kappenstein, C., Alvarez, F.,

Giannetto, G. and Guisnet, M.

Preparation of PtHY catalysts. Influence on the catalytic properties of the complexes used as platinum precursors (45)325

Guerrero-Ruiz, A.

Calorimetric study of the coadsorption of hydrogen and carbon monoxide over ruthenium graphitized carbon black catalysts (55)21

Guilleux, M.F., see Herrmann, J.M. (53)117

Guisnet, M. and Magnoux, P.

Coking and deactivation of zeolites influence of the pore structure (54)1

Guisnet, M., see Fouche, V. (58)189

Guisnet, M., see Lambertson, J.L. (54)101

Guisnet, M., see Gnep, N.S. (43)155

Guisnet, M., see Lambertson, J.L. (54)91

Guisnet, M., see Guerin, M. (45)325

Gupta, N.M., Belapurkar, A.D., Ramarao, K.V.S. and Iyer, R.M.

PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. II. Water poisoning (43)1

Gupta, N.M., see Belapurkar, A.D. (43)15

Gutierrez-Ortiz, J.I., see Gonzalez-Marcos, J.A. (60)1

Gutsze, A., see Lange, J.-P. (45)345

H

Hadders, R.H., see Ramselaar, W.L.T.M. (51)263

Hadj-Aissa, M., see Duprez, D. (49)67

Hadj-Aissa, M., see Duprez, D. (49)75

Hagiwara, H., see Okado, H. (41)121

Haiduk, J., see Baranski, A. (54)111

Haishui, P., see Jingfa, D. (41)13

Hakkarainen, R., see Salmi, T. (49)285

Halache, T., see Atanasova, P. (48)295

Halasz, I.

Selective oxidation and dehydrogenation of methanol on Y-Ba-Cu-O catalysts (47)L17

Hamar-Thibault, S., Koscielski, T., Damon, J.P. and Masson, J.

Structure of Raney nickel catalysts modified by chromium hydroxide deposition (56)57

Hamar-Thibault, S., see Bonnier, J.M. (53)217

Hanaoka, T., see Takeuchi, K. (48)149

Hardeveld, R. van, see Van Hardeveld, R. (43)301

Harding, D.A., see Addison, S.W. (45)307

Harvey, T.G. and Pratt, K.C.

Hydrodenitrogenation using ternary metal catalysts on mixed zeolite- γ -alumina supports (47)335

Hashimoto, S., see Fujimoto, K. (50)223

Hatayama, F., see Ono, T. (49)273

Hattori, A., see Hibino, T. (44)95

Hattori, H., see Kulkarni, S.J. (49)27

Hattori, H., see Suzuka, H. (47)L7

Hattori, H., see Tanabe, K. (48)63

Hattori, T., see Mori, Y. (55)225

Hattori, T., see Kito, S. (48)107

Hausinger, G., see Rajadhyaksha, R.A. (51)67

Hawkes, C.M., see Owen, G. (58)69

Hayasaka, T., see Uchiyama, S. (47)151

Hayasaka, T., see Uchiyama, S. (42)143

Hayashi, A., see Fujikawa, K. (50)199

Hayashi, H., Somei, J. and Okazaki, T.

Ammonia-hydrazine conversion processes. XVI. Conversion of benzophenone azine into hydrazine catalyzed by sulphonic acids in a two-phase system (41)213

Heinemann, H., see Blanco, J. (55)151

Heinerman, J.J.L., see De Wind, M. (43)239

Helenius, A., see Vuori, A. (52)41

Hepburn, J.S., Stenger Jr., H.G. and Lyman, C.E.

Distributions of HF co-impregnated rhodium, platinum and palladium in alumina honeycomb supports (55)271

Hepburn, J.S., Stenger Jr., H.G. and Lyman, C.E.

- Co-impregnation of rhodium into alumina honeycombs with acids and salts (56)107
- Hepburn, J.S., Stenger Jr., H.G. and Lyman, C.E.
Effects of drying on the preparation of HF co-impregnated rhodium/ Al_2O_3 catalysts (55)287
- Hernandez, F., see Morales, A. (41)261
- Herrmann, J.-M., see Fernández, A. (57)191
- Herrmann, J.M., Ramarosan, E., Tempere, J.F. and Guilleux, M.F.
Semiconductivity study of ceria-supported nickel related to its methanation catalytic activity (53)117
- Hess, D., see Baranski, A. (54)111
- Hevcling, J., Van der Beek, A. and De Pender, M.
Oligomerization of ethene over nickel-exchanged zeolite Y into a diesel-range product (42)325
- Hibino, T., Niwa, M., Hattori, A. and Murakami, Y.
Chemical vapour deposition method for fine-control of the pore-opening size of Na-mordenite (44)95
- Hidaka, S., Iino, A., Gotoh, M., Ishikawa, N., Mibuchi, T., Nita, K. and Yamazoe, N.
Preparation of iron/zeolite catalysts active for toluene disproportionation in the presence of hydrogen sulphide (43)57
- Hilaire, L., see Barrault, J. (46)269
- Hildenbrand, H.-H. and Lintz, H.-G.
Solid electrolyte potentiometry at an oxide electrode (49)L1
- Hiltzik, L., see Babcock, K.W. (51)295
- Hindermann, J.P., see Kiennemann, A. (59)165
- Hindermann, J.P., see Kiennemann, A. (53)197
- Hindermann, J.P., see Diagne, C. (51)165
- Hindermann, J.P., see Diagne, C. (50)43
- Hino, M., see Matsushashi, H. (59)205
- Hino, M., see Arata, K. (59)197
- Hoang, C., Kachaya, Y., Arnaud, Y., Dalmon, J.A. and Teichner, S.J.
Characterization of nickel catalysts by chemisorption techniques, X-ray diffraction and magnetic measurements. Effects of support and precursor and hydrogen pretreatment (46)281
- Hodgson, P.K.G. and Stewart, N.J.
Inorganic salt catalysis in the process for the conversion of alcohols/alkylphenols into ethoxychloride surfactant intermediates (46)313
- Hodnett, B.K., see O'Connor, M. (42)91
- Holgado, M.J. and Rives, V.
Hydrogenolysis of light hydrocarbons on rhodium/titania. Strong metal-support interactions and analysis of kinetic data (41)L1
- Holl, Y., Garin, F., Maire, G., Borg, F., Engelhard, P.A. and Grossmangin, J.
Effect of pretreatment conditions on hydrocarbon reactions on alumina-supported molybdenum (46)57
- Holmen, A., Schanke, D. and Sundmark, G.
Hydrogenation of carbon monoxide over iron catalysts on different supports (50)211
- Homan Free, H.W., see De Wind, M. (43)239
- Homeyer, S.T. and Sachtler, W.M.H.
Oxidative redispersion of palladium and formation of PdO particles in NaY. An application of high precision TPR (54)189
- Homs, N., Ramirez de la Piscina, P., Gracia, M., Gancedo, J.-R. and Fierro, J.-L.G.
Iron-based ammonia synthesis catalysts prepared via non-oxidic precursors (59)249
- Homs, N., see Ramirez de la Piscina, P. (49)259
- Hong, C.-T., Yeh, C.-T. and Yu F.-H.
Effect of reduction and oxidation treatments on Pd/ZnO catalysts (48)385
- Hoodless, I.M., see Fan, C. (54)53
- Howe, R.F., see Wong, S.T. (47)225
- Hu, J., Schwarz, J.A. and Huang, Y.-J.
Effect of thermal treatment on the reducibility of alumina-supported nickel catalysts (51)223
- Hu, Z., see Kunimori, K. (53)L11
- Huaiming, W., see Jingfa, D. (41)13
- Huang, K., see Shen, Y. (57)55
- Huang, T.-J., Yu T.-C. and Chang, S.-H.
Effect of calcination atmosphere on $\text{CuO}/\gamma\text{-Al}_2\text{O}_3$ catalyst for carbon monoxide oxidation (52)157
- Huang, Y., White, A., Walpole, A. and Trimm, D.L.
Control of porosity and surface area in alumina: I. Effect of preparation conditions (56)177
- Huang, Y.-J., see Xue, J. (42)61
- Huang, Y., see White, A. (56)187
- Huang, Y.-J., see Hu, J. (51)223
- Huang, Z., see Fu, Y. (55)11
- Hudgins, R.R.
Comments on "Claus Reaction: Effect of forced feed composition cycling" (letter to the Editor) (50)303
- Hughes, R., see Acharya, D.R. (58)53
- Hughes, R., see Acharya, D.R. (52)115
- Hugues, F., see Chauvin, Y. (42)205
- Hunger, M., see Volter, J. (42)15
- Hunter, N.R., Gesser, H.D., Morton, L.A., Yarlagadda, P.S. and Fung, D.P.C.
Methanol formation at high pressure by the catalyzed oxidation of natural gas and by the sensitized oxidation of methane (57)45
- Hunter, R., see Hutchings, G.J. (41)253

- Hunter, R., see Jansen van Rensburg, L. (42)29
 Hutchings, G.J., Hunter, R. and Jansen van Rensburg, L.
 Methanol and dimethyl ether conversion to hydrocarbons using tungsten trioxide/alumina as catalyst. A study of catalyst reactivation (41)253
 Hutchings, G.J., Themistocleous, T. and Copperthwaite, R.G.
 Methanol conversion to hydrocarbons using modified clinoptilolite catalysts: Investigation of catalyst lifetime and reactivation (43)133
 Hutchings, G.J., see Gottschalk, F.M. (51)127
 Hutchings, G.J., see Nkosi, B. (43)33
 Hutchings, G.J., see Jansen van Rensburg, L. (42)29

I

- Iapalucci, C., see Centi, G. (46)197
 Ichikawa, M., see Fukuoka, A. (50)294
 Idriss, H., see Diagne, C. (50)43
 Idriss, H., see Kiennemann, A. (59)165
 Idriss, H., see Diagne, C. (51)165
 Ihm, S.-K., see Moon, S.-J. (42)307
 Iino, A., see Hidaka, S. (43)57
 Iizuka, T., see Inoue, T. (46)1
 Ikai, S., Okamoto, M., Nishioka, H., Miyamoto, T., Matsuzaki, K., Suzuki, K., Kiyozumi, Y., Sano, T. and Shin, S.
 ZSM-5 pelletized and modified with $\text{Ca}_3(\text{PO}_4)_2$ and HPO_4^{2-} as a catalyst for methanol conversion (49)143
 Ikai, S., see Okado, H. (41)121
 Ikariya, S., see Osada, Y. (59)59
 Ikefuji, Y., see Okazaki, H. (43)71
 Ilie, I., see Pop, G. (56)L1
 Ilieva, L., Matyshak, V., Kotsev, N., Kadushin, A. and Shopov, D.
 Investigation of the effect of water and oxygen on the reaction of propylene with cobalt oxide-magnesium oxide solid solutions. II. IR Spectroscopic study (50)37
 Ilieva, L., Kotsev, N. and Shopov, D.
 Investigation of the effect of water and oxygen on the reaction of propylene with cobalt oxide-magnesium oxide solid solutions. I. Thermodesorption study (50)27
 Illigen, U., see Backhaus, K.O. (47)131
 Imamura, H., Takada, T., Kasahara, S. and Tsuchiya, S.
 Efficient dehydrogenation of methanol using hydride-forming alloys (Zr_2Ni , R_2Co_7 and RFe_2) as hydrogen acceptors (58)165
 Imanaka, T., see Okamoto, Y. (55)215
 Imanaka, T., see Nitta, Y. (56)9
 Imanaka, T., see Nitta, Y. (53)15
 Imanishi, K., see Ayame A. (56)73
 Inoue, M., Nakajima, K., Kurusu, A., Miyake, T. and Inui T.
 Alcohol synthesis from syngas on group VIII metal catalysts promoted by $\text{Mo-Na}_2\text{O}$ (49)213
 Inoue, T., Iizuka, T. and Tanabe, K.
 Hydrogenation of carbon dioxide and carbon monoxide over supported rhodium catalysts under 10 bar pressure (46)1
 Inui, T., Matsuda, H., Okaniwa, H. and Miyamoto, A.
 Preparation of silico-alumino-phosphates by the rapid crystallization method and their catalytic performance in the conversion of methanol to light olefins (58)155
 Inui, T., Nagata, H., Daito, N., Matsuda, H. and Miyamoto, A.
 Contrast between H-ZSM-5 and H-Fe-silicates of the pentasil pore structure in propylene conversion (51)155
 Inui, T., see Inoue, M. (49)213
 Inui, T., see Ishigaki, Y. (47)293
 Ioannides, T., see Akubuiro, E.C. (46)297
 Ione, V.M., see Kikhtyanin, O.V. (42)1
 Irvine, E.A., see Moyes, R.B. (55)L5
 Ishigaki, Y., Uba, M., Nishida, S. and Inui, T.
 Application of $\text{Co-Mn}_2\text{O}_3\text{-Ru}$ catalyst to the process for producing high-calorie substitute natural gas from coke oven gas (47)193
 Ishikawa, N., see Hidaka, S. (43)57
 Ismagilov, Z.R., see Ovsyannikova, I.A. (55)75
 Ismail, M., see Stanislaus, A. (41)109
 Ito, T., Bonardet, J.L., Fraissard, J., Nagy, J.B., Andrh, C., Gabelica, Z. and Derouane, E.G.
 About coke deposition on zeolite HY. A ^{129}Xe -NMR study
 Bonardet, J.L., see Ito, T. (43)L5
 Ito, T., see Dumont, N. (54)L1
 Itoh, H., Tanabe, H. and Kikuchi, E.
 Novel catalyst for liquid phase Fischer-Tropsch synthesis: Potassium-promoted copper-iron ultrafine particles prepared by liquid-phase chemical deposition (47)L1
 Itoh, T. and Tsuchida, Y.
 New catalyst for hydrocracking of vacuum residue (51)213
 Iton, L.E., see Sajkowski, D.J. (51)255

Ivanova, P., Eliyas, A., Stamenova, R., Petrov, L. and Tsvetanov, C.

Kinetics of the esterification of methacrylic acid with ethylene oxide in the presence of ferric chloride immobilized on polymer support (53)41

Iyer, R.M., see Gupta, N.M. (43)15

Iyer, R.M., see Belapurkar, A.D. (43)1

Izumizawa, T., see Ayame, A. (48)25

J

Jablonski, E.L., see Pieck, C.L. (56)1

Jablonski, E.L., see Pieck, C.L. (55)1

Jablonski, E.L., see Caruso, F. (51)195

Jablonski, J.M., see Kepinsky, L. (54)267

Jackson, D., see Golunski, S.E. (48)123

Jacobs, P.A., see Grobet, P.J. (56)L21

Jacobs, P.A., see Martens, J.A. (45)85

Jacobs, P.A., see Ernst, S. (48)137

Jacquinet, E., Mendes, A., Raatz, F., Marcilly, C., Ribeiro, F.R. and Caeiro, J.

Catalytic properties in cyclohexene transformation of modified HY zeolites (60)101

Jaeger, H., see Foger, K. (56)137

Jaeger, H., see Behrsing, T. (47)67

Jaeger, H., see Behrsing, T. (54)289

Jalett, H.P., see Blaser, H.U. (52)19

Janardanarao, M., see Salvapati, G.S. (48)223

Jansen van Rensburg, L., Hunter, R. and Hutchings, G.J.

Methanol conversion to hydrocarbons. Primary versus secondary formation of methane and ethene (42)29

Jansen van Rensburg, L., see Hutchings, G.J. (41)253

Jean, G., see Rahman, A. (50)131

Jenner, G.

The selectivity problem in the homogeneous carbonylation and hydrocarbonylation of alcohols and esters - a review (50)99

Jennings, J.R., Lambert, R.M., Nix, R.M., Owen, G. and Parker, D.G.

Novel methanol synthesis catalysts derived from intermetallic precursors: CO₂ poisoning and molecular mechanism of the synthesis reaction (50)157

Jennings, J.R., see Owen, G. (58)69

Jentys, A., Rumpelmayr, G. and Lercher, L.A.

Hydroxyl groups in phosphorus-modified HZSM-5 (53)299

Jerschke, H.-G., see Kürschner, U. (57)167

Jia, L.-J., see Ren, Z.-X. (49)83

Jimenez, C., see Aramendia, M.A. (43)41

Jingfa, D., Shuzhong, D., P. Haishui and W.

Huaiming

Acidic properties of ZSM-5 zeolite and conversion of ethanol to diethyl ether

Jodzis, S., see Kowalczyk, Z. (58)29

Johnson, S.D. and Smith, J.E., Jr.

Coal liquefaction using an intermetallic hydride to distribute hydrogen and catalyze the reaction (44)53

Jones, D., see Briot, P. (59)141

Jovanovic, D., see Terlecki-Baricevic, A. (47)141

Jurczyk, K. and Kania, W.

Base properties of modified γ -alumina (56)253

Jusek, M., see Reschetilowski, W. (56)L15

Jusek, M., see Reschetilowski, W. (56)L15

K

Kachaya, Y., see Hoang, C. (46)281

Kaczmarczyk, W., see Grabowska, H. (47)347

Kaddouri, A., Kieffer, R., Kiennemann, A., Poix, P. and Rehspringer, J.L.

Oxidative coupling of methane over LnLiO₂ compounds (Ln = Sm, Nd, La) (51)L1

Kadushin, A., see Ilieva, L. (50)37

Kalenik, Z., see Lane, G.S. (53)183

Kaliaguine, S., see Rahman, A. (50)131

Kan Xie, see Zhen Xiang Liu (56)207

Kanai, J. and Kawata, N.

Aromatization of n-hexane over galloaluminosilicate and gallosilicate (55)115

Kanazawa, T., see Fujikawa, K. (50)199

Kang, B.-C., Wu, S.-T., Tsai, H.-H. and Wu, J.-C.

Effect of catalyst composition on the hydrodesulfurization and hydrodemetalization of atmospheric residual oil (45)221

Kania, W., see Jurczyk, K. (56)253

Kanno, T., see Fujikawa, K. (50)199

Kanta Rao, B., see Sivaraj, Ch. (45)L11

Kanta Rao, P., see Mahipal Reddy, B. (55)L1

Kantarao, P., see Sivaraj, Ch. (45)103

Kappenstein, C., see Guerin, M. (45)325

Kapustin, G.I., Brueva, T.R., Klyachko, A.L., Beran, S. and Wichterlova, B.

Determination of the number and acid strength of acid sites in zeolites by ammonia adsorption. Com-

- parison of calorimetry and temperature-programmed desorption of ammonia (42)239
- Karge, H.G., see Lange, J.-P. (45)345
- Kärger, J. and Ruthven, D.
Comments on "diffusion of alkanes in molecular sieves: Evidence for confinement effects" (52)165
- Kärger, B., see Volter, J. (42)15
- Karroua, M., see Delmon, B. (50)L7
- Karroua, M., see Delmon, B. (51)L21
- Kasahara, S., see Imamura, H. (58)165
- Kastanas, G.N., Tsigdinos, G.A. and Schwank, J.
Selective oxidation of methane over Vycor glass, quartz glass and various silica, magnesia and alumina surfaces (44)33
- Katrib, A., see Stanislaus, A. (41)109
- Kaushik, V.K. and Ravindranathan, M.
ESCA study of copper catalysts used for the hydration of acrylonitrile to acrylamide (47)339
- Kawabe, M., see Nitta, Y. (53)15
- Kawata, N., see Kanai, J. (55)115
- Kawata, N., see Uchiyama, S. (42)143
- Kawata, N., see Uchiyama, S. (47)151
- Kepinsky, L., Wolcyrz, M. and Jablonski, J.M.
Effect of high-temperature reduction on carburization of alumina-supported palladium: Evidence for palladium-aluminium alloy formation (54)267
- Ketchik, S.V., see Sengupta, G. (55)165
- Khan, A.Z., see Larkins, F.P. (47)205
- Kieffer, R., Kiennemann, A., Rodriguez, M., Bernal, S. and Rodriguez-Izquierdo, J.M.
Promoting effect of lanthana in the hydrogenation of carbon monoxide over supported rhodium catalysts (42)77
- Kieffer, R., see Kaddouri, A. (51)L1
- Kiennemann, A., Diagne, C., Hindermann, J.P., Chaumette, P. and Courty, P.
Higher alcohols synthesis from $\text{CO} + 2\text{H}_2$ on cobalt-copper catalyst. Use of probe molecules and chemical trapping in the study of the reaction mechanism (53)197
- Kiennemann, A., Idriss, H., Hindermann, J.P., Lavalley, J.C., Vallet, A., Chaumette, P. and Courty, Ph.
Methanol synthesis on $\text{Cu/ZnAl}_2\text{O}_4$ and $\text{Cu/ZnO-Al}_2\text{O}_3$ catalysts: Influence of carbon monoxide pretreatment on the formation and concentration of formate species (59)165
- Kiennemann, A., see Diagne, C. (51)165
- Kiennemann, A., see Diagne, C. (50)43
- Kiennemann, A., see Kieffer, R. (42)77
- Kiennemann, A., see Kaddouri, A. (51)L1
- Kijnski, J., Niedzielski, P.J. and Baiker, A.
Synthesis of cyclic amines and their alkyl derivatives from amino alcohols over supported copper catalysts (53)107
- Kikhtyanin, O.V., Mastikhin, V.M. and Ione, K.G.
Methanol conversion on aluminophosphates with zeolite structure (42)1
- Kikuchi, E., see Matsuda, T. (45)171
- Kikuchi, E., see Itoh, H. (47)L1
- Kikuchi, E., see Matsukata, M. (41)199
- Kim, C.-S., see Massoth, F.E. (58)199
- Kim, J.C., see Lee, J.S. (57)1
- Kim, S. and D'Aniello, Jr., M.J.
Electron microscopy study of a rejuvenated vehicle-aged automotive exhaust catalyst (56)45
- Kim, S. and D'Aniello, Jr., M.J.
Analytical electron microscopy study of two vehicle-aged automotive exhaust catalysts having dissimilar activities (56)23
- Kim, Y.G., see Lee, J.S. (57)1
- King, T.S., see Sheffer, G.R. (44)153
- Kirilov-Stefanov, P., see Terlecki-Baricevic, A. (47)141
- Kirkov, N., see Petrov, L. (59)13
- Kitamura, M., see Okamoto, Y. (55)215
- Kito, S., Hattori, T. and Murakami, Y.
Expert systems approach to computer-aided design of catalysts (48)107
- Kiyozumi, Y., see Suzuki, K. (42)35
- Kiyozumi, Y., see Ikai, S. (49)143
- Klinowski, J., see Reschetilowski, W. (56)L15
- Klinowski, J., see Maesen, T.L.M. (48)373
- Klinowski, J., see Axon, S.A. (56)L9
- Klvana, D., Chaouki, J., Kusohorsky, D., Chavarie, C. and Pajonk, G.M.
Catalytic storage of hydrogen: Hydrogenation of toluene over a nickel/silica aerogel catalyst in integral flow conditions (42)121
- Klyachko, A.L., see Kapustin, G.I. (42)239
- Knözinger, H., see Rajadhyaksha, R.A. (51)81
- Knözinger, H., see Rajadhyaksha, R.A. (51)67
- Kobayashi, K., see Matsukata, M. (41)199
- Koberstein, E., see Engler, B. (48)71
- Kodera, T., see Fujikawa, K. (50)199
- Koerner, G.S., see Altomare, C.A. (45)291
- Kolke, T.J.G., Gorte, R.J. and Kokotailo, G.T.
Determination of framework concentrations of gallium in [Ga]-ZSM-5 (54)177
- Koike, S., see Osada, Y. (59)59
- Kojima, M., see Schwarz, S. (56)263
- Kokotailo, G.T., see Kolke, T.J.G. (54)177
- Koltsov, N.I. and Fedotov, V.Kh.
Catalytic reaction selectivity in unsteady states (53)89

- Koltsov, N.I. and Alekseev, B.V.
Effectiveness of reaction proceeding with degree kinetics in a plate catalyst grain (46)189
- Korayabkina, N.A., see Ovsyannikova, I.A. (55)75
- Korf, S.J., Roos, J.A., Derksen, J.W.H.C., Vreeman, J.A., Van Ommen, J.G. and Ross, J.R.H.
Oxidative coupling of methane over Ba/CaO catalysts. A comparison with Li/MgO (59)291
- Korf, S.J., Roos, J.A., De Bruijn, N.A., Van Ommen, J.G. and Ross, J.R.H.
Lithium chemistry of lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (58)131
- Korf, S.J., Roos, J.A., Veltman, L.J., Van Ommen, J.G. and Ross, J.R.H.
Effect of additives on lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (56)119
- Korf, S.J., see Roos, J.A. (52)131
- Korf, S.J., see Roos, J.A. (52)147
- Koscielski, T., Bonnier, J.M., Damon, J.P. and Masson J.
Catalytic hydrogenation on Raney nickel catalyst modified by chromium hydroxide deposition (49)91
- Koscielski, T., see Hamar-Thibault, S. (56)57
- Kosugi, N., see Fukuoka, A. (50)294
- Kotsev, N., see Vassileva, M. (49)125
- Kotsev, N., see Ilieva, L. (50)37
- Kotsev, N., see Ilieva, L. (50)27
- Kotter, M., Lintz, H.-G., Turek, T. and Trimm, D.L.
Structure and selectivity changes in vanadia-titania catalysts used to promote the reduction of nitric oxide with ammonia (52)225
- Kouwenhoven, H.W., see Maesen, T.L.M. (48)373
- Kowalczyk, Z., Jodzis, S.
Activity and thermoresistance of fused iron catalysts for ammonia synthesis (58)29
- Kraak, P., see Engels, S. (55)93
- Kraan, A.M. van der, see Ramselaar, W.L.T.M. (54)217
- Kramer, R., Fischbacher, M. and Gruber, H.L.
Slow uptake of oxygen and carbon monoxide by platinum/silica (EUROPT-1) and subsequent effects on hydrogenation of benzene and hydrogenolysis of methylcyclopentane (42)337
- Kramer, R., see Gennari, U. (44)239
- Kribii, A., see Dumas, J.M. (47)L9
- Kriz, J.F., see Wilson, M.F. (41)177
- Kulkarni, S.J., Hattori, H. and Tanabe, K.
Effects of pH during preparation on the physico-chemical, acidity and catalytic properties and coking tendencies of HZSM-5-type catalysts (49)27
- Kumar, R., see Thangaraj, A. (57)L1
- Kumar, R., see Reddy, J.S. (58)L1
- Kumar, R., see Rao, G.N. (49)307
- Kumari, V. Durga, see Venkat Rao, V. (49)165
- Kumbiliev, K., see Petrov, L. (59)31
- Kundu, M.L., see Sengupta, G. (55)165
- Kung, H.-Y., see Tsai, T.C. (50)1
- Kunimori, K., Nakamura, H., Hu, Z. and Uchijima, T.
Chemisorptive and catalytic properties of rhodium mixed oxide (RhNbO₄) catalyst during oxidation-reduction treatments. A high activity for ethane hydrogenolysis (53)L11
- Kuriacose, J.C., see Shanthi, K. (46)241
- Kuroda, H., see Fukuoka, A. (50)294
- Kürschner, U., Jerschke, H.-G., Schreier, E. and Völter, J.
Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization (57)167
- Kurusu, A., see Inoue, M. (49)213
- Kusohorsky, D., see Klvana, D. (42)121
- Kuwabara, M., see Ohtsuka, Y. (47)303
- Kuznetsov, V.L., see Lisitsyn, A.V. (55)235
- Kvisle, S., Agüero, A. and Sneed, R.P.A.
Transformation of ethanol into 1,3-butadiene over magnesium oxide/silica catalysts (43)117

L

- Labady, M., see Laine, J. (44)11
- Labady, M., see Laine, J. (53)81
- Laborde, M.A., see Agarars, H. (45)53
- Lacroix, M., see Ramirez, J. (52)211
- Ladwig, G., see Martin, A. (49)205
- Laine, J., Ferrer, Z., Labady, M., Chang, V. and Frias, P.
Structure and activity of chromium-promoted Raney copper catalysts for carbon monoxide oxidation (44)11
- Laine, J., Ruggiero, A., Brito, J.L., Gallardo, J., Labady, M. and Severino, F.
Catalytic effect on hydrogen sulphide generation from a tar sand (53)81
- Lambert, R.M., see Ungar, R.K. (42)L1
- Lambert, R.M., see Jennings, J.R. (50)157
- Lambert, R.M., see Owen, G. (58)69
- Lamy-Pitara, E., Lghouzouani, L., Piktas, M. and Barbier, J.

- Effect of lead on the activity of platinum catalysts (44)261
- Lane, G.S., Kalenik, Z. and Wolf, E.E.
Methane oxidative coupling over titanate catalysts (53)183
- Lange, J.-P., Gutsze, A., Algeier, J. and Karge, H.G.
Coke formation through the reaction of ethene over hydrogen mordenite. III. IR and ^{13}C -NMR studies (45)345
- Lansink Rotgerink, H.G.J., Paalman, R.P.A.M., Van Ommen, J.G. and Ross, J.R.H.
Studies on the promotion of nickel-alumina coprecipitated catalysts. II. Lanthanum oxide (45)257
- Lansink Rotgerink, H.G.J., Mercera, P.D.L., Van Ommen, J.G. and Ross, J.R.H.
Studies on the promotion of nickel-alumina coprecipitated catalysts. I. Titanium oxide (45)239
- Lansink Rotgerink, H.G.J., Slaa, J.C., Van Ommen, J.G. and Ross, J.R.H.
Studies on the promotion of nickel-alumina coprecipitated catalysts. III. Cerium oxide (45)281
- Lapszewicz, J.A., see Ekstrom, A. (56)L29
- Larkins, F.P. and Khan, A.Z.
Investigation of Kolbel-Engelhardt synthesis over iron-based catalysts (47)209
- Lausch, H., see Engels, S. (55)93
- Lavalley, J.C., see George, Z.M. (43)167
- Lavalley, J.C., see Kiennemann, A. (59)165
- Lawrence, D.J. and Gosling, K.
FCC catalyst performance evaluation (43)213
- Lázár, K., see Schay, Z. (51)33
- Lázár, K., see Schay, Z. (51)49
- Lázár, K., see Lietz, G. (45)71
- Lazaro, J., see López Cordero, R. (48)341
- Le Van Mao, R., Nguyen, T.M. and McLaughlin, G.P.
The bioethanol-to-ethylene process (B.E.T.E.) (48)265
- Le Van Mao, R., see Nguyen T.M. (58)119
- Le Van Mao, R., see Levesque, P. (57)31
- Le Van Mao, R. and Dufresne, L.
Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane stream-cracker (52)1
- Leal, O., see Pietri De Garcia, E. (50)55
- Lechert, H., see Bezouhanova, Cv. (49)101
- Leclercq, C., see Fernández, A. (57)191
- Leclercq, C., see Da Silva, P.N. (54)203
- Lechman, Y., see Sheintuch, M. (49)55
- Lee, B.-J., see Wang, I. (54)257
- Lee, J.-F., Lee, M.-D. and Tseng, P.-K.
Fischer-Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties (52)193
- Lee, J.C., Trimm, D.L. and Wainwright, M.S.
Metal-support effects in copper catalysts for the liquid phase hydrolysis of acrylonitrile (60)173
- Lee, J.C., Cant, N.W., Trimm, D.L. and Wainwright, M.S.
Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects (57)215
- Lee, J.K., Verykios, X.E. and Pitchai, R.
Support participation in chemistry of ethylene oxidation on silver catalysts (44)223
- Lee, J.K., Xenophon, L., Verykios, E. and Pitchai, R.
Support and crystallite size effects in ethylene oxidation catalysis (50)171
- Lee, J.S., Kim, J.C. and Kim, Y.G.
Methyl formate as a new building block in C_1 chemistry - a review (57)1
- Lee, M.-D., see Lee, J.-F. (52)193
- Lemay, G., see Rahman, A. (50)131
- Lemberton, J.L., Touzeyidio, M. and Guisnet, M.
Catalytic hydroprocessing of simulated coal tars. I. Activity of a sulphided Ni-Mo/ Al_2O_3 catalyst for the hydroconversion of model compounds (54)91
- Lemberton, J.L., Touzeyidio, M. and Guisnet, M.
Catalytic hydroprocessing of simulated coal tars. II. Effect of acid catalysts on the hydroconversion of model compounds on a sulphided Ni-Mo/ Al_2O_3 catalyst (54)101
- Lemonidou, A.A. and Vasalos, I.A.
Preparation and evaluation of catalysts for the production of ethylene via steam cracking. Effects of operating conditions on the performance of $12\text{CaO}/7\text{Al}_2\text{O}_3$ catalyst (54)119
- Lemos, F., Lopes, J.M., Ramoa Ribeiro, F. and Derouane E.
Influence of cerium on the catalytic properties of ZSM-20 zeolite in the cracking of n-heptane: Comparison with rare earth Y zeolites (49)175
- Lercher, J.A., see Jentys, A. (53)299
- Levesque, P., Bianchi, D., Le Van Mao, R. and Pajonk, G.M.
Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts (57)31
- Levesque, P. and Dao, L.H.
Alkylation of benzene using an aqueous solution of ethanol (53)157
- Lghouzouani, L., see Lamy-Pitara, E. (44)261
- Li, F., see Wang, W.-X. (55)33
- Li, K., see Acharya, D.R. (52)115

- Lieshout, L.H.W. van, see Van Hardeveld, R. (43)301
- Lietz, G., Nimz, M., Volter, J., Lazar, K. and Gucci, L. Double promotion of palladium/silica catalysts by iron and magnesium oxide in synthesis of methanol from carbon monoxide and hydrogen (45)71
- Lin, Y.-M. Wang, I. and Yeh, C.-T. Activity and stability of a copper(II) oxide-zinc(II) oxide catalyst for oxidative dehydrogenation of cyclohexanol to cyclohexanone (41)53
- Lindner, J., see Villa Garcia, M.A. (56)281
- Lintz, H.-G., see Hildenbrand, H.-H. (49)L1
- Lintz, H.-G., see Kotter, M. (52)225
- Lion, M., see George, Z.M. (43)167
- Lisitsyn, A.S., Golovin, A.V., Chuvilin, A.L., Kuznetsov, V.L., Romanenko, A.V., Danilyuk, A.F. and Yermakov, Yu.I. Thermal decomposition of metal carbonyls on oxide supports containing surface hydrides: A route to highly dispersed metal catalysts with unusual properties (55)235
- Litvak, G.S., see Echevskii, G.V. (43)85
- Lloyd, D., see Owen, G. (58)69
- Lloyd, E.C., see Collins, D.J. (41)81
- López, J.M., see Lemos, F. (49)175
- López Agudo, A., see López Cordero, R. (48)341
- López Agudo, A., see Fierro, J.L.G. (48)353
- López Agudo, A., see López Cordero, R. (56)197
- López Agudo, A., see Ramirez, J. (57)223
- López Cordero, R., Gil Llambías, F.J., Palacios, J.M., Fierro, J.L.G. and López Agudo, A. Surface changes of alumina induced by phosphoric acid impregnation (56)197
- López Cordero, R., Esquivel, N., Lazaro, J., Fierro, J.L.G. and López Agudo, A. Effect of phosphorus on molybdenum-based hydro-treating catalysts. I. Characterization of the oxidic state of P-Mo/Al₂O₃ systems (48)341
- Lopez Cordero, R., see Fierro, J.L.G. (48)353
- Lopez Nieto, J., see Centi, G. (46)197
- Lowendahl, L. and Otterstedt, J.E. Effect of hydrothermal treatment on alumina as support for noble metal catalysts (59)89
- Lowendahl, L., see Axelsson, I.-A. (44)251
- Lowendahl, L., see Evaldsson, L. (55)123
- Lu, D.-S., see Ren, Z.-X. (49)83
- Lucke, B., see Martin, A. (57)203
- Lucke, B., see Martin, A. (50)149
- Lucke, B., see Martin, A. (49)205
- Lucki, J., see Chen, N.Y. (42)169
- Luna, D., see Blanco, A. (53)135
- Lund, C.R.F., see Yarlagaadda, P. (54)139
- Lunsford, J.H., see Conway, S.J. (56)149

- Luy, J.C., see Yori, J.C. (46)103
- Luy, J.C., see Yori, J.C. (41)1
- Luys, M.J., Van Oeffelt, P.H., Brouwer, W.G.J., Pijpers, A.P. and Scholten, J.J.F. Surface and sub-surface oxidation of copper and supported copper catalysts by nitrous oxide (46)161
- Lyman, C.E., see Hepburn, J.S. (56)107
- Lyman, C.E., see Hepburn, J.S. (55)271
- Lyman, C.E., see Hepburn, J.S. (55)287

M

- Madhusudhan Rao, V. and Shankar, V. Characterization of supported copper catalysts for methanol dehydrogenation prepared from silica hydrogel (45)335
- Maesen, T.L.M., Sulikowski, B., Van Bekkum, H., Kouwenhoven, H.W. and Klinowski, J. Low-temperature plasma. Calcination of zeolite NH₄, Na-Y (48)373
- Maezawa, A., see Okamoto, Y. (55)215
- Magnoux, P., see Guisnet, M. (54)1
- Magnoux, P., see Fouche, V. (58)189
- Magranger, J., see Fuentes, M. (47)363
- Mahipal Reddy, B., Narsimha, K., Sivaraj, Ch. and Kanta Rao, P. Titration of active sites for partial oxidation of methanol over V₂O₅/SnO₂ and MoO₃/SnO₂ catalysts by a low-temperature oxygen chemisorption technique (55)L1
- Mahipal Reddy, B., see Sivaraj, Ch. (45)L11
- Maier, W.F., see Cogen, J.M. (48)235
- Mainwaring, P.R., see Wilson, M.F. (41)177
- Maire, G., see Holl Y. (46)57
- Maire, G., see Bond, G.C. (41)313
- Maistriaux, L., see Derouane, E.G. (51)L13
- Maitra, A.M., Cant, N.W. and Trimm, D.L. Novel hydrotreating catalysts prepared from heteropolyanion complexes impregnated on alumina (48)187
- Mallát, T., and Petró, J. Selective hydrodehalogenation of an olefinic compound on doubly poisoned palladium-carbon catalyst; the mechanism of metal ion poisoning (57)71
- Mallát, T., Szabo, S., Petro, J., Mendoroz, S. and Folgado, M.A.

- Real and apparent dispersion of carbon supported palladium-cobalt catalysts (53)29
- Manninger, I., Xu Xian Lun, Tétényi, P. and Paál, Z. Aromatization of n-hexane over Pt-KI catalyst (51)L7
- Marafi, M., Stanislaus, A., Mumford, C.J. and Fahim, M.
Regeneration of spent hydroprocessing catalysts: Metals removal (47)83
- Marcelin, G., see Agarwal, S.K. (53)71
- Marcilly, C., see Mercier Des Rochette, B. (58)35
- Margot, E., see Pradier, C.-M. (43)177
- Marinas, J.M., see Aramendia, M.A. (43)41
- Marinas, J.M. see Blanco, A. (53)135
- Marinova, C., see Terlecki-Baricevic, A. (47)141
- Marques de Cruz, Bugli, G. and Djega-Mariadas-sou, G.
Cyclohexene hydrogenation on rhodium catalysts in the gas phase. Kinetics of the reaction and origin, mechanism and kineti (46)131
- Marshall, C.L., see Sajkowski, D.J. (51)255
- Martens, J.A., Pérez-Pariente, J., Sastre, E., Corma, A. and Jacobs, P.A.
Isomerization and disproportionation of *m*-xylene. Selectivities induced by the void structure of the zeolite framework (45)85
- Martens, J.A., see Ernst, S. (48)137
- Martens, J.A., see Grobet, P.J. (56)L21
- Martens, J.H.A. and Prins, R.
Influence of pH on the preparation of monometallic rhodium and platinum, and bimetallic rhodium-platinum catalysts supported on γ -alumina (46)31
- Martin, A., Nowak, S., Lücke, B., Wicker, W. and Fahlke, B.
Coupled conversion of methanol and C₄-hydrocarbons (CMHC) on iron-containing ZSM-5 type zeolites (57)203
- Martin, A., Nowak, S., Lücke, B. and Günschel, H.
Coupled conversion of methanol and C₄ hydrocarbons to lower olefins (50)149
- Martin, A., Lücke, B., Seeboth, H. and Ladwig, G.
Ammoxidation of picolines on vanadium phosphate catalysts (49)205
- Martin, G.A., Bates, A., Ducarme, V. and Mirodatos, C.
Oxidative conversion of methane and C₂ hydrocarbons on oxides: Homogeneous versus heterogeneous processes (47)287
- Martin-Aranda, R.M., see Corma, A. (59)237
- Martin-Martinez, J.M., Rodriguez-Reinoso, F. and Vannice, M.A.
Carbon-supported, (alkali metal) (Fe₂Mn(CO)₁₂)-derived catalysts. Adsorption properties and catalytic behavior in carbon monoxide hydrogenation (51)93
- Martinez, A., see Cambor, M.A. (55)65
- Martinez Correia, J.A., see De Miguel, S.R. (60)47
- Martins, E., see Altomare, C.A. (45)291
- Masai, M. see Nishiyama, S. (47)25
- Masai, M., see Baba, T. (52)81
- Masai, M., see Bun, S. (59)13
- Massiani, P., Chauvin, B., Fajula, F., Figueras, F. and Gueguen, C.
Activation of zeolite. I. Physicochemical characterization of calcined and self-steamed samples (42)10
- Masson, J., see Bonnier, J.M. (42)285
- Masson, J., see Koscielski, T. (49)91
- Masson, J., see Hamar-Thibault, S. (56)57
- Massoth, F.E., Kim, C.-S. and Cui, J.-W.
Studies of molybdena-alumina catalysts. XVII sulfided catalysts exposed to air (58)199
- Massoth, F.E., see Miciukiewicz, J. (49)247
- Masters, A.F., see Brown, S.J. (48)1
- Mastikhin, V.M., see Kikhtyanin, O.V. (42)1
- Mathews, J.F., see Thompson, S.C. (47)45
- Matralis, H.K., see Delmon, B. (51)L21
- Matsuda, H., see Inui, T. (51)155
- Matsuda, H., see Inui, T. (58)155
- Matsuda, T., Nagashima, H. and Kikuchi, E.
Physical and catalytic properties of smectite clays pillared by alumina in disproportionation of 1,2,4-trimethylbenzene (45)171
- Matsushashi, H., Hino, M. and Arata, K.
Solid catalyst treated with anion: XIX. Synthesis of the solid superacid catalyst of tin oxide treated with sulfate ion (59)205
- Matsui, J., Sodesawa, T. and Nozaki, F.
Activity decay of potassium-promoted iron oxide catalyst for dehydrogenation of ethylbenzene (51)203
- Matsukata, M., Sekine, S., Kobayashi, K., Kikuchi, E. and Morita, Y.
Hexane-carbon dioxide reaction catalyzed by alkaline earth metal oxides. II. Reaction network (41)199
- Matsumoto, H., see Tanabe, S. (45)27
- Matsuura, I., Utsumi, Y., Doi, T. and Yoshida, Y.
Oxidative coupling of methane over lithium-doped ultrafine crystalline magnesium oxide (47)295
- Matsuzaki, I., see Nakajima, T. (52)237
- Matsuzaki, K., see Ikai, S. (49)143
- Matsuzaki, T., see Takeuchi, K. (48)149
- Matsuzaki, Y., see Suzuki, K. (42)35

- Matusek, K., see Schay, Z. (51)49
- Matyshak, V., see Ilieva, L. (50)37
- Maximov, C., see Petrov, L. (41)23
- Maxwell, I.E., see Biswas, J. (58)19
- Maxwell, I.E., see Biswas, J. (58)1
- McCabe, R.W. and Mitchell, P.J.
Exhaust-catalyst development for methanol-fueled vehicles. III. Formaldehyde oxidation (44)73
- McCulloch, A., see Rowley, L. (52)69
- McDonald, M.A., see Baltrus, J.P. (48)199
- McElhiney, G., see Addison, S.W. (45)307
- McLaughlin, G.P., see Le Van Mao, R. (48)265
- McNeil, M.A., Schack, C.J. and Rinker, R.G.
Methanol synthesis from hydrogen, carbon monoxide and carbon dioxide over a CuO/ZnO/Al₂O₃ catalyst. II. Development of a phenomenological rate expression (50)265
- McNeil, M.A., see Schack, C.J. (50)247
- Mehandziev, D., see Terlecki-Baricevic, A. (47)141
- Meima, G.R., Van Leur, M.G.J., Van Dillen, A.J., Geus, J.W., Bongaarts, J.E., Van Buren, F.R., Derks, L.J.G.M. and Delcour, K.
Preparation and characterization of thermostable silver on α -alumina catalysts (44)133
- Meinecke, C.-D., see Wendt, G. (45)209
- Mendes, A., see Jacquinot, E. (60)101
- Mendioroz, S., see Mallat, T. (53)29
- Mendioroz, S., see Ramirez, J. (57)223
- Mercera, P.D.L., Van Ommen, J.G., Doesburg, E.B.M., Burggraaf, A.J. and Ross, J.R.H.
Zirconia as a support for catalysts: Evolution of the texture and structure on calcination in air (57)127
- Mercera, P.D.L., see Lansink Rotgerink, H.G.J. (45)239
- Mercier Des Rochettes, B., Marcilly, C., Gueguen, C. and Bousquet, J.
Kinetic study of hydrogen transfer of olefins under catalytic cracking conditions (58)35
- Meriaudeau, P., see Primet, M. (52)263
- Mertens, M., see Grobet, P.J. (56)121
- Meyers, B.L., see Partenheimer, W. (51)13
- Meyers, B.L., see Sajkowski, D.J. (51)255
- Mibuchi, N., see Hidaka, S. (43)57
- Miciukiewicz, J., Qader, Q. and Massoth, F.E.
Studies of molybdena-alumina catalysts. XV. Effect of fluorine-modified alumina on catalyst properties (49)247
- Mieth, J.A. and Schwarz, J.A.
Effects of alumina dissolution and metal ion buffering on the dispersion of alumina supported nickel and ruthenium catalysts (55)137
- Mifsud, A., see Corma, A. (47)123
- Migone, R.A., see Agarwal, S.K. (53)71
- Milburn, D.R., see Adkins, B.D. (44)199
- Milestone, N.B., see Wong S.T. (47)225
- Mimoun, H., Robine, A., Bonnaudet, S. and Cameron C.J.
Oxypropylene of natural gas (58)269
- Miranda, R., see Collins, D.J. (41)81
- Mirodatos, C., see Martin, G.A. (47)287
- Mirodatos, C., see Bussiere, P. (58)219
- Mishima, S., see Nakajima, T. (52)237
- Mishra, K.K., see Sengupta, G. (55)165
- Missen, R.W., see Norval, G.W. (54)37
- Mitchell, P.J., see McCabe, R.W. (44)73
- Miyake, T., see Inoue, M. (49)213
- Miyamoto, A., see Inui, T. (51)155
- Miyamoto, A., see Inui, T. (58)155
- Miyamoto, T., see Ikai, S. (49)143
- Miyata, H., see Ono, T. (49)273
- Mocholi, F.A., see Cambor, M.A. (55)65
- Moctezuma, E., see Ozkan, U. (58)305
- Moffat, J.B., see Ahmed, S. (58)83
- Moffat, J.B., see Ahmed, S. (54)241
- Moffat, J.B., see Nayak, V.S. (60)87
- Moffat, J.B., see Nayak, V.S. (47)95
- Moggi, P., Predieri, G., Albanesi, G., Papadopoulos, S. and Sappa, E.
Ammonia synthesis over ruthenium supported catalysts derived from Ru₃(CO)₁₂ (53)L1
- Mol, J.C., see Robinson, W.R.A.M. (44)165
- Mole, T., see Behrnsing, T. (47)67
- Molhoek, P., see Scheffer, B. (46)11
- Montes, M., see Aguinaga, A. (51)1
- Monti, D.M., see Blaser, H.U. (52)19
- Moon, S.-J. and Ihm, S.-K.
Nitric oxide chemisorption and temperature-programmed desorption study of cobalt and molybdenum catalysts supported on activated carbon and alumina (42)307
- Morales, A., Ramirez de Agudelo, M.M. and Hernandez F.
Adsorption mechanism of phosphorus on alumina (41)261
- Morbideilli, M., see Cao, G. (41)301
- Moreno, M.S., see Blanco, A. (53)135
- Mori, T., see Mori, Y. (55)225
- Mori, Y., Mori, T., Hattori, T. and Murakami, Y.
Design of a potassium-promoted Rh/Al₂O₃ catalyst for synthesis of C₂ oxygenates by pulse surface reaction rate analysis (55)225
- Morita, Y., see Matsukata, M. (41)199
- Mörke, W., see Engels, S. (55)93
- Morton, L.A., see Hunter, N.R. (57)45
- Morup, S., see Clausen, B.S. (48)327

- Mostad, H.B., Riis, T.U. and Ellestad, O.H.
Shape selectivity in Y-zeolites. Catalytic cracking of decalin-isomers in fixed bed micro reactors (58)105
- Moulijn, J.A., see Van Doorn, J. (48)253
- Moulijn, J.A., see Arnold, P. (48)241
- Moulijn, J.A., see Van Doorn, J. (49)319
- Moulijn, J.A., see Scheffer, B. (46)11
- Moyes, R.B., Walker, D.W., Wells, P.B., Whan, D.A. and Irvine, E.A.
An unusual form of non-Arrhenius behaviour in ethyne hydrogenation over palladium catalysts (55)L5
- Mukai, T., see Ono, T. (49)273
- Mukesh, D., see Banerjee, A.A. (59)1
- Mulder, A., see Van der Grift, C.J.G. (60)181
- Mulder, E.A., see Van der Grift, C.J.G. (59)275
- Mumford, C.J., see Marafi, M. (47)83
- Munuera, G., see Fernández, A. (57)191
- Murakami, Y., see Sawa, M. (53)169
- Murakami, Y., see Kito, S. (48)107
- Murakami, Y., see Mori, Y. (55)225
- Murakami, Y., see Hibino, T. (44)95
- Muraki, H. and Fujitani, Y.
Steam reforming of n-heptane using a Rh/MgAl₂O₄ catalyst (47)75
- Muraki, H., Yokota, K. and Fujitani, Y.
Nitric oxide reduction performance of automotive palladium catalysts (48)93
- Muraki, H., see Shinjoh, H. (49)195
- Muramatsu, A., see Yagita, H. (53)L5
- Musca, G., see Pop, G. (56)L1

N

- Nag, N.K., Sai Prasada Rao, K., Chary, K.V.R., Rama Rao, B. and Subrahmanyam, V.S.
Characterization of γ -alumina-supported tungsten sulfide hydroprocessing catalysts. I. Low temperature oxygen chemisorption (41)165
- Nagashima, H., see Matsuda, T. (45)171
- Nagata, H., see Inui, T. (51)155
- Nagy, J.B., see Derouane, E.G. (51)L13
- Nagy, J.B., see Derouane, E.G. (52)169
- Nagy, J.B., see Ito, T. (43)L5
- Nai Juan Wu, see Zhen Xiang Liu (56)207
- Nakajima, K., see Inoue, M. (49)213
- Nakajima, T., Tanabe, K., Yamaguchi, T., Matsuzaki, I. and Mishima, S.
Conversion of ethanol to acetone over zinc oxide-calcium oxide catalyst. Optimization of catalyst preparation and reaction conditions and deduction of reaction mechanism (52)237
- Nakamura, H., see Kunimori, K. (53)L11
- Nakano, K., see Baba, T. (52)81
- Nakayama, H., see Nishiyama, S. (47)25
- Nam, S.W. and Gavalas, G.R.
Adsorption and oxidative adsorption of sulfur dioxide on γ -alumina (55)193
- Narayanan, R., see Chuang, S.S.C. (57)241
- Narayanan, S., see Venkat Rao, V. (49)165
- Narsimha, K., see Mahipal Reddy, B. (55)L1
- Nayak, V.S. and Moffat, J.B.
Catalytic activity and product distribution in the cracking of n-hexane over heteropoly oxometalates and ZSM-5 zeolite (47)95
- Nayak, V.S. and Moffat, J.B.
Effect of silicon-to-aluminum ratio and template on the cracking of C₆-C₈ alkenes over ZSM-5 zeolite (60)87
- Nenova, V., see Bezouhanova, Cv. (49)101
- Nguyen, T.M., Le Van Mao, R.
Conversion of ethanol in aqueous solution over ZSM-5 zeolites. Study of the reaction network (58)119
- Nguyen, T.M., see Le Van Mao, R. (48)265
- Nicolaides, C.P., Scurrell, M.S. and Vink, J.
Quality control in the preparation of zeolite ZSM-5 using a catalytic test reaction (55)259
- Nicot, P., see Pitchon, V. (47)353
- Niedzielski, P.J., see Kijenski, J. (53)107
- Nimz, M., see Lietz, G. (45)71
- Nishida, S., see Ishigaki, Y. (47)193
- Nishioka, H., see Ikai, S. (49)143
- Nishiyama, S., Yanagi, H., Nakayama, H., Tsuruya, S. and M. Masai
The role of tin in supported rhodium-tin bimetallic catalysts (47)25
- Nishiyama, S., see Baba, T. (52)81
- Nishiyama, S., see Bun, S. (59)13
- Nita, K., see Hidaka, S. (43)57
- Nitta, Y., Kawabe, M., Sun, L., Ohmachi, Y. and Imanaka, T.
Preparation of uniformly dispersed nickel/silica catalysts from synthetic nickel-crysotile (53)15
- Nitta, Y., Ueno, K. and Imanaka, T.
Selective hydrogenation of α,β -unsaturated aldehydes on cobalt-silica catalysts obtained from cobalt chrysotile (56)9
- Niwa, M., see Hibino, T. (44)95
- Niwa, M., see Sawa, M. (53)169
- Nix, R.M., see Jennings, J.R. (50)157

- Nix, R.M., see Owen, G. (58)69
- Nkosi, B., Coville, N.J. and Hutchings, G.J.
Vapour phase hydrochlorination of acetylene with group VIII and IB metal chloride catalysts
- Coville, N.J., see Nkosi, B. (43)33
- Norral, G.W. and Phillips, M.J.
Comments on induction periods for synthesis of hydrocarbons from syngas over metal/zeolite catalysts using a two-stage process (43)193
- Norval, G.W., Phillips, M.J., Missen, R.W. and Smith, W.R.
Calculated equilibria for the alkene and alcohol aromatization processes (54)37
- Nosova, L.V., see Ryndin, Yu. (42)131
- Nosyreva, G.N., see Echevskii, G.V. (43)85
- Nourbakhsh, N., Tsotsis, T.T. and Webster, I.A.
Model planar alumina catalyst preparation and aging under hydrotreating conditions (50)65
- Nowak, S., see Martin, A. (50)149
- Nowak, S., see Martin, A. (57)203
- Nozaki, F., see Matsui, J. (51)203
- O**
- O'Connor, C.T., see Schwarz, S. (56)263
- O'Connor, M. and Hodnett, B.K.
Preparation of vanadium phosphorus oxide catalysts. I. Dissolution and reduction of vanadium pentoxide and isolation of the precursor (42)91
- Obayashi, Y., see Uchiyama, S. (47)151
- Odenbrand, C.U.I., see Ahlstrom, A.F. (60)157
- Odenbrand, C.U.I., see Ahlstrom, A.F. (60)143
- Odriozola, J.A., see Blanco, J. (55)151
- Oelderik, J.M., Sie, S.T. and Bode, D.
Progress in the catalysis of the upgrading of petroleum residue. A review of 25 years of R & D on Shell's residue hydroconversion technology (47)1
- Ogasawara, S., see Osada, Y. (59)59
- Ohbayashi, Y., see Uchiyama, S. (42)143
- Ohmachi, Y., see Nitta, Y. (53)15
- Ohno, T., see Ono, T. (49)273
- Ohta, T., see Ayame, A. (48)25
- Ohtsuka, Y., Kuwabara, M. and Tomita, A.
Selective oxidative coupling of methane to ethylene with molten oxides containing alkali metal chloride (47)303
- Okabe, K., see Abe, H. (52)171
- Okado, H., Shoji, H., Sano, T., Ikai, S., Hagiwara, H. and Takaya, H.
Deactivation resistance of ZSM-5 type zeolites containing alkaline earth metals used for methanol conversion (41)121
- Okamoto, M., see Ikai, S. (49)143
- Okamoto, Y., Maezawa, A., Kitamura, M. and Imanaka, T.
Molybdena-alumina interaction chemistry effect of preadsorbed sulphate and fluorine anions on the dispersion of molybdenum (55)215
- Okaniwa, H., see Inui, T. (58)155
- Okazaki, H., Soeda, M., Ikefuji, Y. and Tamura, R.
Selective hydrogenation of neat isoquinoline. II. Reaction pathway over Raney nickel
- Okazaki, H., Soeda, M., Onishi, K. and Tamura, R.
Selective hydrogenation of neat isoquinoline. I. Activities of some commercial catalysts and effects of coexisting sulphur-containing compounds in the substrate (41)99
- Okazaki, T., see Hayashi, H. (41)213
- Olivier, D., see Amara, M. (41)147
- Olivier, D., see Amara, M. (51)141
- Ollivier, J., see Casbas, F. (50)87
- Omata, K., see Fujimoto, K. (50)223
- Onishi, K., see Okazaki, H. (41)99
- Ono, T., Mukai, T., Miyata, H., Ohno, T. and Hayatama, F.
Selectivities and intermediates in the oxidation of butene on vanadium oxides on titania (49)273
- Ono, Y., see Baba, T. (55)301
- Oosten, H.J. van, see Colen, G.C.M. (43)335
- Osada, Y., Koike, S., Fukushima, T., Ogasawara, S., Shikada, T. and Ikariya, S.
Oxidative coupling of methane over Y_2O_3 -CaO catalysts (59)59
- Otterstedt, J.-E., see Axelsson, I.-A. (44)251
- Otterstedt, J.-E., see Evaldsson, L. (55)123
- Otterstedt, J.E., see Lowendahl, L. (59)89
- Oudar, J., see Pradier, C.-M. (43)177
- Oudet, F., Vejux, A. and Courtine, P.
Evolution during thermal treatment of pure and lanthanum-doped Pt/Al_2O_3 and $Pt-Rh/Al_2O_3$ automotive exhaust catalysts: Transmission electron microscopy studies on model samples (50)79
- Ovsyannikova, I.A., Gol'denberg, G.I., Korayabkina, N.A., Shkrabina, R.A. and Ismagilov, Z.R.
Study of structural and mechanical properties of granulated alumina supports using X-ray microprobes (55)75
- Owen, G., Hawkes, C.M., Lloyd, D., Jennings, J.R., Lambert, R.M. and Nix, R.M.

- Methanol synthesis catalysts derived from ternary rare earth, copper, zirconium and rare earth, copper, titanium intermetallic alloys (58)69
 Owen, G., see Jennings, J.R. (50)157
 Ozkan, U., Moctezuma, E. and Driscoll, S.A.
 Transient response studies of C₄ hydrocarbon oxidation over MnMoO₄/MoO₃ catalysts (58)305

P

- Paál, Z. and Xian Lun, X.
 Skeletal reactions of n-hexane over Pt/SiO₂ (EU-ROPT-1) Mechanism changeover governed by hydrogen
 Xian Lun, X., see Paál, Z. (43)L1
 Paál, Z., see Manninger, I. (51)L7
 Paalman, R.P.A.M., see Lansink-Rotgerink, H.G.J. (45)257
 Pajonk, G.M., see Levesque, P. (57)31
 Pajonk, G.M., see Klvana, D. (42)121
 Palacios, F.J., see López Cordero, R. (56)197
 Papadopoulos, S., see Moggi, P. (53)L1
 Pardillos, J., Coq, B. and Figueras, F.
 Isomerization of *o*-dichlorobenzene over H-mordenite. Effect of the silicon-to-aluminium ratio (51)285
 Parera, J.M., Querini, C.A. and Figoli, N.S.
 Deactivation of the Pt-Re/Al₂O₃ catalytic functions during a commercial cycle (44)L1
 Parera, J.M., see Pieck, C.L. (56)1
 Parera, J.M., see Pieck, C.L. (55)1
 Parera, J.M., see Querini, C.A. (52)249
 Parera, J.M., see Caruso, F. (51)195
 Parera, J.M., see Yori, J.C. (41)1
 Parera, J.M., see Yori, J.C. (46)103
 Parera, J.M., see Querini, C.A. (53)53
 Pariente, J., see Fuentes, M. (47)363
 Parker, D.G., see Jennings, J.R. (50)157
 Parker, L.M., see Rogers, D.E. (51)181
 Parra, C.F., see Pietri De García, E. (50)55
 Partenheimer, W. and Meyers, B.L.
 Regeneration of a P-V-O-Zn butane oxidation catalyst using chlorine containing hydrocarbons (51)13
 Paul-Boncour, V. see Barrault, J. (46)269
 Payen, E., see Barbaux, Y. (44)117
 Pender, M. de, see Heveling, J. (42)325
 Pepin, I., see Diagne, C. (50)43
 Peplinski, B., see Engels, S. (55)93
 Percheron-Guegan, A. see Barrault, J. (46)269
 Pereira, C.J., Cheng, W.-C., Beekman, J.W. and Suarez W.
 Performance of the Minilith. A shaped hydrotreatment catalyst (42)47
 Pérez, R., see Fuentes, M. (47)363
 Pérez Pariente, J., see Cambor, M.A. (55)65
 Pérez-Pariente, J., see Martens, J.A. (45)85
 Perrichon, V. and Durupt, M.C.
 Thermal stability of alkali metals deposited on oxide supports and their influence on the surface area of the support (42)217
 Perrichon, V., see Bussiere, P. (58)219
 Petró, J., see Mallat, T. (57)71
 Petro, J., see Mallat, T. (53)29
 Petrov, L., Kumbilleva, K. and Kirkov, N.
 Kinetic model of nitrobenzene hydrogenation to aniline over industrial copper catalyst considering the effects of mass transfer and deactivation (59)31
 Petrov, L., Eliyas, A., Maximov, C. and Shopov, D.
 Ethylene oxide oxidation over a supported silver catalyst. I. Kinetics of uninhibited oxidation (41)23
 Petrov, L., see Spojakina, A. (56)163
 Petrov, L., see Ivanova, P. (53)41
 Petrov, L., see Eliyas, A. (41)39
 Phillips, M.J., see Norval, G.W. (54)37
 Pichat, P., see Fernández, A. (57)191
 Pieck, C.L., Jablonski, E.L., Verderone, R.J. and Parera, J.M.
 Selective regeneration of catalytic functions of Pt-Re-S/Al₂O₃-Cl during coke burning (56)1
 Pieck, C.L., Verderone, R.J., Jablonski, E.L. and Parera, J.M.
 Burning of coke on Pt-Re/Al₂O₃ catalyst: Activation energy and oxygen reaction order (55)1
 Pien, S.-I., see Chuang, S.S.C. (57)241
 Pietri De García, E., De Goldwasser, M.R., Parra, C.F. and Leal, O.
 Oxidative dehydrogenation of cyclohexene over cobalt-exchanged Y-zeolites (50)55
 Pijper, A.P., see Luys, M.J. (46)161
 Piktas, L., see Lamy-Pitara, E. (44)261
 Pillai, C.N., see Shanthi, K. (46)241
 Pires, J., Brotas De Carvalho, M., Ramoa Ribiero, R. and Derouane, E.
 Heats of adsorption and mass transfer coefficients of alkanes in zeolites Y and ZSM-20 (53)273
 Piscina, P. Ramirez de la, see Homs, N. (59)249

- Pitchai, R., see Lee, J.K. (50)171
 Pitchai, R., see Lee, J.K. (44)223
 Pitchon, V., Gallezot, P., Nicot, C. and Praliaud, H.
 Study by analytical electron microscopy of the potassium distribution on silica-supported nickel and palladium catalysts (47)353
 Plantenga, F.L., see De Wind, M. (43)239
 Plischke, J.K. and Vannice, M.A.
 Effect of pretreatment on the adsorption properties of silver crystallites (42)255
 Poix, P., see Kaddouri, A. (51)L1
 Pokhriyal, S.K., see Ratnasamy, P. (55)265
 Ponc, V., see Rek, P.J.M. (46)213
 Pop, E., see Pop, G. (56)L1
 Pop, G., Musca, G., Pop, E., Tomi, P., Sarau, A. and Ilie, I.
 Iron complexes used for the preparation of zeolites supported iron catalysts (56)L1
 Popielarz, A., see Sulikowski, B. (42)195
 Powell, B.R. and Chen, Y.-L.
 Analytical electron microscopy of a vehicle-aged automotive catalyst (53)233
 Prada Silvy, R., Grange, P., Delannay, F. and Delmon, B.
 Influence of the nature of the activating molecules on the catalytic activity of cobaltmolybdenum/alumina catalysts (46)113
 Pradier, C.-M., Margot, E., Berthier, Y. and Oudar, J.
 Hydrogenation of 1,3-butadiene on Pt(111). Comparison with results on Pt(110) and Pt(100) (43)177
 Prairrie, M.R., Su, S., Renken, A., Ruterana, P. and Buffat, P.-A.
 Chemical and structural changes of Na_2MoO_4 as a methanol dehydrogenation catalyst (57)83
 Praliaud, H., see Pitchon, V. (47)353
 Pratt, K.C., see Harvey, T.G. (47)331
 Predieri, G., see Moggi, P. (53)L1
 Primet, M., Azhar, M. and Guenin, M.
 Influence of the support towards platinum catalysed 1,3-butadiene hydrogenation (58)241
 Primet, M., El Azhar, M., Frety, R. and Guenin, M.
 Determination of the accessible metallic surface of supported platinum: Quantitative infrared spectroscopic study of carbon monoxide adsorption (59)153
 Primet, M. and Meriaudeau, P.
 Interaction of carbon monoxide with molybdena-promoted platinum/silica: Fourier transform infrared study at room temperature (52)263
 Primet, M., see Briot, P. (59)141
 Primo, J., see Corma, A. (59)333
 Primo, J., see Corma, A. (49)109

- Primo, J., see Corma, A. (59)237
 Primo, J., see Climent, M.J. (51)113
 Prins, R., see Arnold, P. (48)241
 Prins, R., see Martens, J.H.A. (46)31
 Przystajko, W., Fiedorow, R. and Dalla Lana, I.G.
 Ammoxidation of toluene over coke-covered alumina (59)129
 Psaro, R., see Dossi, C. (46)145
 Purves, J.H., see Bedford, M. (58)147

Q

- Qader, Q., see Miciukiewicz, J. (49)247
 Qi Xun Bao, see Zhen Xiang Liu (56)207
 Qi, Y., Wang, Z. and Wang, R.
 Design and study of catalysts for selective hydrogenation (53)63
 Qiu, F.-Y., Weng, L.-T., Ruiz, P. and Delmon, B.
 Effect of antimony (IV) oxide, bismuth phosphate and tin (IV) oxide on the catalytic properties of compound oxide catalysts in the oxidative dehydrogenation of n-butene (47)113
 Qiu, F.-Y., Weng, L.-T., Sham, E., Ruiz, P. and Delmon, B.
 Effect of added Sb_2O_3 , BiPO_4 or SnO_2 on the catalytic properties of ZnFe_2O_4 in the oxidative dehydrogenation of butene to butadiene (51)235
 Querini, C.A., Figoli, N.S. and Parera, J.M.
 Hydrocarbon reforming on Pt-Re-S/ Al_2O_3 -Cl coked in a commercial reactor (52)249
 Querini, C.A., Figoli, N.S. and Parera, J.M.
 Activity and selectivity modifications produced by coke deposition on mono- and bimetallic reforming catalysts (53)53
 Querini, C.A., see Parera, J.M. (44)L1

R

- Raatz, F., see Jacquinot, E. (60)101
 Rahman, A., Adnot, A., Lemay, G., Kaliaguine, S. and Jean, G.
 Chemical modification of H-ZSM-5 adsorption of rhodium and phosphorus complexes (50)131

- Rajadhyaksha, R.A., Hausinger, G., Zeilinger, H., Ramstetter, A., Schmelz, H. and Knözinger, H. Vanadia supported on titania-silica: Physical characterization and activity for the selective reduction on nitric oxide (51)67
- Rajadhyaksha, R.A. and Knözinger, H. Ammonia adsorption on vanadia supported on titania-silica catalyst. An infrared spectroscopic investigation (51)81
- Rama Rao, B., see Nag, N.K. (41)165
- Ramachandran, A. and Chakrabarty, D.K. Silica supported rhodiumruthenium bimetallic catalysts in carbon monoxide hydrogenation. I. Influence of the method of preparation and methanation behaviour (42)229
- Ramanamurty, K.V., see Salvapati, G.S. (48)223
- Ramarao, K.V.S., see Gupta, N.M. (43)15
- Ramaroson, E., see Herrmann, J.M. (53)117
- Ramirez de Agudelo, M.M., see Morales, A. (41)261
- Ramirez de la Piscina, P., see Homs, N. (59)249
- Ramirez de la Piscina, P., Homs, N. and Fierro, J.-L.G. Adsorption of group VIII metal cyanide complexes on acid-modified γ -alumina. Preparation of new supported metallic catalysts (49)259
- Ramirez, J., Cuevas, R., López Agudo, A., Mendiorez, S. and Fierro, J.L.G. Effect of fluorine on hydrogenation of cyclohexene on sulfided Ni (or Co)-Mo/Al₂O₃ catalysts (57)223
- Ramirez, J., Fuentes, S., Diaz, G., Vrinat, M., Breyse, M. and Lacroix, M. Hydrodesulphurization activity and characterization of sulphided molybdenum and cobalt-molybdenum catalysts. Comparison of alumina silica-alumina- and titania-supported catalysts (52)211
- Ramoa Ribeiro, F., see Lemos, F. (49)175
- Ramoa Ribeiro, F., see Gnep, N.S. (43)155
- Ramoa Ribeiro, R., see Pires, J. (53)273
- Ramselaar, W.L.T.M., Hadders, R.H., Gerkema, E., De Beer, V.H.J., Van Oers, E.M. and Van der Kraan, A.M. Sulfidation of carbon-supported iron oxide catalysts (51)263
- Ramselaar, W.L.T.M., Craijé, M.W.J., Gerkema, E., De Beer, V.H.J. and Van der Kraan, A.M. Sulphidation of carbon-supported iron-molybdenum oxide catalyst (54)217
- Ramselaar, W.L.T.M., De Beer, V.H.J. and Van der Kraan, A.M. Iron sulphide containing hydrodesulphurization catalysts. Mössbauer study of the sulphidability of α -iron(III) oxide (42)153
- Ramstetter, A., see Rajadhyaksha, R.A. (51)67
- Rao, G.N., Kumar, R. and Ratnasamy, P. Shape selectivity of zeolite EU-1 in reactions of aromatic hydrocarbons (49)307
- Rao, L.-F., see Fukuoka, A. (50)294
- Rao, V. Venkat, see Venkat Rao, V. (49)165
- Ratnasamy, P. and Pokhriyal, S.K. Surface passivation and shape selectivity in xylene isomerization over ZSM-48 (55)265
- Ratnasamy, P., see Thangaraj, A. (57)1
- Ratnasamy, P., see Reddy, J.S. (58)L1
- Ratnasamy, P., see Rao, G.N. (49)307
- Ravindranathan, M., see Kaushik, V. (47)339
- Reddy, B. Mahipal, see Sivaraj, Ch. (45)L11
- Reddy, J.S., Kumar, R. and Ratnasamy, P. Titanium silicalite-2: Synthesis, characterization and catalytic properties (58)L1
- Rehspringer, J.L., see Kaddouri, A. (51)L1
- Reichmann, M.G. Cracking of C₉ paraffins over xylene isomerization catalysts (57)179
- Rek, P.J.M., Den Hartog, A.J. and Poncet, V. Effect of chlorine and sulphur on the selectivity of supported platinum-rhenium catalysts in reactions of n-hexane (46)213
- Ren, Z.-X., Wang, J., Jia, L.-J. and Lu D.-S. Effect of carbon dioxide on methanol synthesis over different catalysts (49)83
- Renken, A., see Prairie, M.R. (57)83
- Rensburg, L. Jansen van, see Jansen van Rensburg, L. (42)29
- Resasco, D.E., see Garcia, C.L. (46)251
- Reschetilowski, W., Einicke, W.-D., Jusek, M., Schollner, R., Freude, D., Jusek, M. and Klinowski, J. Magic-angle-spinning nuclear magnetic resonance and adsorption studies of dealumination and realumination of zeolite ZSM-5 (56)L15
- Rey, F., see Corma, A. (59)267
- Ribeiro, F.R. see Jacquinet, E. (60)101
- Richardson, W.T., Cullinane, M.B. and Frank, A.S. Characterization and deactivation of NiO-ThO₂ catalysts (48)159
- Richter-Mendau, J., see Backhaus, K.O. (47)131
- Riis, T.U., see Mostad, H.B. (58)105
- Rinker, R.G., see McNeil, M.A. (50)265
- Rinker, R.G., see Schack, C.J. (50)247
- Rives, V., see Holgado, M.J. (41)L1
- Robert, E., see Boitiaux, J.P. (49)219

- Robert, E., see Boitiaux, J.P. (49)235
- Robine, A., see Mimoun, H. (58)269
- Robinson, W.R.A.M. and Mol, J.C.
Structure and activity in CO/H₂ of Cu/ZnO/Al₂O₃ methanol synthesis catalysts (60)61
- Robinson, W.R.A.M. and Mol, J.C.
Copper surface area and acidity in CO/H₂ of Cu/ZnO/Al₂O₃ methanol synthesis catalysts (60)73
- Robinson, W.R.A.M. and Mol, J.C.
Characterization and catalytic activity of copper/alumina methanol synthesis catalysts (44)165
- Robinson, W.R.A.M., see Mol, J.C. (60)61
- Robinson, W.R.A.M., see Mol, J.C. (60)73
- Rodriguez-Izquierdo, J.M., see Kieffer, R. (42)77
- Rodriguez, M., see Kieffer, R. (42)77
- Rodriguez-Reinoso, F., see Martin-Martinez, J.M. (51)93
- Rogers, D.E. and Parker, L.M.
DTA apparatus as a catalytic microreactor with on-line analysis of the products (51)181
- Romanenko, A.V., see Lisitsyn, A.V. (55)235
- Roos, J.A., Korf, S.J., Vechof, R.H.J., Van Ommen, J.G. and Ross, J.R.H.
Kinetic and mechanistic aspects of the oxidative coupling of methane over a Li/MgO catalyst (52)131
- Roos, J.A., Korf, S.J., Vechof, R.H.J., Van Ommen, J.G. and Ross, J.R.H.
Reaction path of the oxidative coupling of methane over a lithium-doped magnesium oxide catalyst. Factors affecting the rate of total oxidation of ethane and ethylene (52)147
- Roos, J.A., see Korf, S.J. (59)291
- Roos, J.A., see Korf, S.J. (58)131
- Roos, J.A., see Korf, S.J. (56)119
- Roque-Malherbe, R., see Fuentes, M. (47)363
- Ross, J.R.H., see Mercera, P.D.L. (57)127
- Ross, J.R.H., see Korf, S.J. (58)131
- Ross, J.R.H., see Korf, S.J. (56)119
- Ross, J.R.H., see Korf, S.J. (59)291
- Ross, J.R.H., see Lansink Rotgerink, H.G.J. (45)239
- Ross, J.R.H., see Lansink Rotgerink, H.G.J. (45)257
- Ross, J.R.H., see Lansink Rotgerink, H.G.J. (45)281
- Ross, J.R.H., see Roos, J.A. (52)131
- Ross, J.R.H., see Roos, J.A. (52)147
- Rostrup-Nielsen, J.R., Christiansen, L.J. and Bak Hansen, J.H.
Activity of steam reforming catalysts: Role and assessment (43)283
- Rotgerink, H.G.J. Lansink, see Lansink Rotgerink, H.G.J. (45)281
- Roth, S.A., see Sajkowski, D.J. (51)255
- Rowley, L., Webb, G., Winfield, J.M. and McCulloch, A.
Radiotracers in fluorine chemistry. XIII. Catalysis by fluorinated surfaces: The interaction of [³⁶Cl]-chlorine labelled hydrogen chloride and 1,1-dichlorotetrafluoroethane with fluorinated chromia catalysts (52)69
- Roy, S.K., see Sengupta, G. (55)165
- Ruckenstein, E., see Yarlagadda, P. (54)139
- Ruggiero, A., see Laine, J. (53)81
- Ruiz, P., see Qiu, F.-Y. (51)235
- Ruiz, P., see Qiu, F.-Y. (47)113
- Rumplmayr, G., see Jentys, A. (53)299
- Ruterana, P., see Prairie, M.R. (57)83
- Ruthven, D., see Krger, J. (52)165
- Ryndin, Yu., Nosova, L.V., Boronin, A.I. and Chuviin, A.L.
Effect of dispersion of supported palladium on its electronic and catalytic properties in the hydrogenation of vinylacetylene (42)131
- Ryndin, Yu.A., Stenin, M.W., Boronin, A.I., Bukhtiyarov, V.I. and Zaikovskii, V.I.
Effect of Pd/C dispersion on its catalytic properties in acetylene and vinylacetylene hydrogenation (54)277

S

- Sachdev, A., see Villa Garcia, M.A. (56)281
- Sachinidis, J.I., see Brown, S.J. (48)1
- Sachtler, W.M.H., see Homeyer, S.T. (54)189
- Sachtler, W.M.H., see Tsang, C.M. (46)45
- Sahay, R.N., see Sengupta, G. (55)165
- Sai Prasada Rao, K., see Nag, N.K. (41)165
- Sajkowski, D.J., Roth, S.A., Iton, L.E. Meyers, B.L., Marshall, C.L., Fleisde, T.H. and Delgass, W.N.
X-ray absorption study of vanadium on regenerated catalytic-cracking catalysts (51)255
- Salmi, T. and Hakkarainen, R.
Kinetic study of the low-temperature watergas shift reaction over a CuZnO catalyst (49)285
- Salvapati, G.S., Ramanamurthy, K.V., Janardanarao, M. and Vaidyeswaran, R.
Aromatization of isophorone to 3,5-xylene (48)223

- Salvatierra, J., see Gil Llambias, F.J. (59)185
- Sanders, J.V., see Behrsing, T. (54)289
- Sano, T., see Ikai, S. (49)143
- Sano, T., see Okado, H. (41)121
- Sanseverino, L., see Cao, G. (41)301
- Santilly, D.S.
Mechanism of hexane cracking in ZSM-5 (60)137
- Sappa, E., see Moggi, P. (53)L1
- Sarau, A., see Pop, G. (56)L1
- Sastre, E., see Martens, J.A. (45)85
- Sato, H., see Ayame, A. (48)25
- Satterfield, C.N., see Donnelly, T.J. (52)93
- Satterfield, C.N., see Donnelly, T.J. (56)231
- Saur, O., see George, Z.M. (43)167
- Sawa, M., Niwa, M. and Murakami, Y.
Acid-leached dealuminated mordenite: effect of acid concentration on catalyst life in methanol conversion (53)169
- Sawada, G., see Ayame, A. (48)25
- Scelza, O.A., see De Miguel, S.R. (60)47
- Scelza, O.A., see Ruben de Miguel, S. (44)23
- Scelza, O.A., see De Miguel, S.R. (45)61
- Schack, C.J., McNeil, M.A. and Rinker, R.G.
Methanol synthesis from hydrogen carbon monoxide, and carbon dioxide over a CuO/ZnO/Al₂O₃ catalyst. I. Steady-state kinetics experiments (50)247
- Schack, C.J., see McNeil, M.A. (50)265
- Schanke, D., see Holmen, A. (50)211
- Schaper, H., Berg-Slot, J.J. and Stork, W.H.M.
Stabilized magnesia: a novel catalyst (support) material (54)79
- Schay, Z., Lázár, K., Matussek, K., Bogyay, I. and Guzzi, L.
Morphology and catalytic activity of FeRe bimetallic catalysts supported on silica. II. Catalytic activity in the carbon monoxide/hydrogen reaction (51)49
- Schay, Z., Lázár, K., Matussek, K., Bogyay, I. and Guzzi, L.
Morphology and catalytic activity of iron-rhenium bimetallic catalysts supported on silica. I. Temperature-programmed reduction, X-ray photoelectron spectroscopy and Mössbauer study (51)33
- Scheffer, B., Molhoek, P. and Moulijn, J.A.
Temperature-programmed reduction of NiO-WO₃/Al₂O₃ of hydrodesulphurization catalysts (46)1
- Scheve, J., see Backhaus, K.O. (47)131
- Schmelz, H., see Rajadhyaksha, R.A. (51)67
- Schmidt, J., see Sheintuch, M. (49)55
- Schmitz, W., see Wendt, G. (45)209
- Schollner, R., see Reschetilowski, W. (56)L15
- Scholten, J.J.F., see Van der Steen, P.J. (58)281
- Scholten, J.J.F., see Van der Steen, P.J. (58)291
- Scholten, J.J.F., see Luys, M.J. (46)161
- Schreier, E., see Kürschner, U. (57)167
- Schubert, P., see Engler, B. (48)71
- Schubert, P.F., see Altomare, C.A. (45)291
- Schulz, I.W., see Backhaus, K.O. (47)131
- Schwank, J., see Villa Garcia, M.A. (56)281
- Schwank, J., see Kastanas, G.N. (44)33
- Schwarz, J.A., see Mieth, J.A. (55)137
- Schwarz, J.A., see Xue, J. (42)61
- Schwarz, J.A., see Hu, J. (51)223
- Schwarz, S., Kojima, M. and O'Connor, C.T.
Effect of silicon-to-aluminium ratio and synthesis time on high-pressure olefin oligomerization over ZSM-5 (56)263
- Scurrall, M.S.
Factors affecting the selectivity of the aromatization of light alkanes on modified ZSM-5 catalysts (41)89
- Scurrall, M.S., see Nicolaides, C.P. (55)259
- Seco, A.M., see Gnep, N.S. (43)155
- Seddon, D., see Baker, J.M. (45)L1
- Seeboth, H., see Martin, A. (49)205
- Sekine, S., see Matsukata, M. (41)199
- Self, V.A., see Bedford, M. (58)147
- Sempere, M.E., see Aramendia, M.A. (43)41
- Sengupta, G., Das, D.P., Kundu, M.L., Dutta, S., Roy, S.K., Sahay, R.N., Mishra, K.K. and Ketchik, S.V.
Study of copper-zinc oxide catalysts, characterisation of the coprecipitate and mixed oxide (55)165
- Sermon, P.A., see Bedford, M. (58)147
- Serwicka, E.M., see Centi, G. (46)197
- Severino, F., see Laine, J. (53)81
- Sham, E., see Qiu, F.-Y. (51)235
- Shamsi, A., see Siriwardane, R.V. (60)119
- Shang Xie Qi, see Zhen Xiang Liu (56)207
- Shankar, V., see Madhusudhan Rao, V. (45)335
- Shanthi, K., Pillai, C.N. and Kuriaose, J.C.
Hydrodenitrogenation of simple aromatic amines on molybdena catalysts (46)241
- Sheffer, G.R. and King, T.S.
Effect of preparation parameters on the catalytic nature of potassium promoted Cu-Co-Cr higher alcohol catalysts (44)153
- Sheintuch, M., Schmidt, J., Lectman, Y. and Yahav, G.
Modelling catalyst-support interactions in carbon monoxide oxidation catalysed by Pd/SnO₂ (49)55
- Shen, Y., Wang, S. and Huang, K.

- Effects of chloride precursors on the palladium valency and surface structures of $\text{Pd-Mg}^{2+}/\text{SiO}_2$ catalysts for carbon monoxide hydrogenation (57)55
- Shikada, T., see Osada, Y. (59)59
- Shimokawabe, M., Asakawa, H. and Takezawa, N.
Characterization of copper/zirconia catalysts prepared by an impregnation method (59)45
- Shin, S., see Suzuki, K. (42)35
- Shin, S., see Ikai, S. (49)143
- Shinjoh, H., Muraki, H. and Fujitani, Y.
Periodic operation effects in propane and propylene oxidation over noble metal catalysts (49)195
- Shinohara, H.
Gas-phase acetoxylation of 1,3-butadiene over palladium catalysts. V. X-ray photoelectron spectroscopic study of Pd-Sb-V-CsCl-KOAc catalyst (50)119
- Shkrabina, R.A., see Ovsyannikova, I.A. (55)75
- Shoji, H., see Okado, H. (41)121
- Shopov, D., see Ilieva, L. (50)37
- Shopov, D., see Ilieva, L. (50)27
- Shopov, D., see Eliyas, A. (41)39
- Shopov, D., see Petrov, L. (41)23
- Shuzhong, D., see Jingfa, D. (41)13
- Sie, S.T., see Oelderik, J.M. (47)1
- Silva, P.N. da, see Da Silva, P.N. (54)203
- Silvy, R. Prada, see Prada Silvy, R. (46)113
- Siriwardane, R.V. and Shamsi, A.
Oxidative coupling of methane over calcium manganate and gadolinium manganate perovskites promoted with sodium pyrophosphate (60)119
- Sivaraj, Ch., Mahipal Reddy, B. and Kanta Rao, P.
Selective dehydrogenation of cyclohexanol to cyclohexanone on $\text{Cu-ZnO-Al}_2\text{O}_3$ catalysts (45)L11
- Sivaraj, Ch. and Kantara, P.
Characterization of copper/alumina catalysts prepared by deposition-precipitation using urea hydrolysis. I. Nitrous oxide decomposition and reaction of ethanol (45)103
- Sivaraj, Ch., see Mahipal Reddy, B. (55)L1
- Slaa, J.C., see Lansink Rotgerink, H.G.J. (45)281
- Smith, J.E., see Johnson, S.D. (44)53
- Smith, K.J., see Chan, T.K. (60)13
- Smith, W.R., see Norval, G.W. (54)37
- Sneeden, R.P.A., see Denise, B. (48)365
- Sneeden, R.P.A., see Kvisle, S. (43)117
- Sobczak, J., Vit, Z. and Zdrzil, M.
Non-existence of synergism in the hydrodenitrogenation of pyridine over carbon-supported cobalt-molybdenum sulphide catalysts (45)L23
- Sodesawa, T., see Matsui, J. (51)203
- Soeda, M., see Okazaki, H. (43)71
- Soeda, M., see Okazaki, H. (41)99
- Somei, J., see Hayashi, H. (41)213
- Spinicci, R. and Tofanari, A.
Investigation of the features of zinc oxide-based catalysts for propylene dehydroaromatization (44)179
- Spinicci, R. and Tofanari, A.
Comparative study of the activity of titania and silica-based catalysts for carbon dioxide methanation (41)241
- Spojarkina, A., Damyanova, S., Petrov, L. and Vit, Z.
Effect of phosphorus on the surface state of alumina-supported nickel-molybdenum catalysts for hydrodesulphurization (56)163
- Squire, G.D., see Baldwin, T.R. (56)219
- Squire, G.D., see Burch, R. (46)69
- Squire, G.D., see Burch, R. (43)105
- Stamenova, R., see Ivanova, P. (53)41
- Stammbach, M.R., Valix, M., Trimm, D.L. and Wainwright, M.S.
Pelleted copper ion-exchanged silica catalysts for the hydrolysis of acrylonitrile to acrylamide (55)109
- Stammbach, M.R., Thomas, D.J., Trimm, D.L. and Wainwright, M.S.
Hydrogenation of ethyne over an ion-exchanged copper on silica catalyst (58)209
- Stanislaus, A., Absi-Halabi, M. and Al-Dolama, K.
Effect of nickel on the surface acidity of γ -alumina and alumina-supported nickel-molybdenum hydrotreating catalysts (50)237
- Stanislaus, A., Absi-Halabi, M., Al-Dolama, K., Katrib, A. and Ismail, M.
Effect of thermal treatment on the sintering and structural changes of cobaltmolybdenum/alumina and nickelmolybdenum/alumina hydrotreating catalysts (41)109
- Stanislaus, A., see Marafi, M. (47)83
- Startsev, A.N., Burmistrov, V.A. and Yermakov, Yu.I.
Sulphide catalysts on silica as a support. VIII. Peculiarities of thiophene hydrogenolysis and probable nature of "synergetic effect" (45)191
- Startsev, A.N., Artamonov, E.V. and Yermakov, Yu.I.
Sulphide catalysts on silica as a support. VII. Isotope exchange of hydrogen sulphide with sulphided catalysts (45)183
- Staugaard, P., see Van Doorn, J. (48)253
- Stenger Jr., H.G., see Hepburn, J.S. (55)287
- Stenger Jr., H.G., see Hepburn, J.S. (55)271
- Stenger Jr., H.G., see Hepburn, J.S. (56)107

- Stenin, M.W., see Ryndin, Yu.A. (54)277
 Stork, W.H.J., see Schaper, H. (54)79
 Su, S., see Prairie, M.R. (57)83
 Suarez, W., see Pereira, C.J. (42)47
 Subrahmanyam, V.S., see Nag, N.K. (41)165
 Sugi, Y., see Takeuchi, K. (48)149
 Suib, S.L., see Altomare, C.A. (45)291
 Sulikowski, B. and Popielarz, A.
 Conversion of methanol on ultrastable faujasitic catalysts. Selective formation of hexamethylbenzene (42)195
 Sulikowski, B., see Maesen, T.L.M. (48)373
 Sun, L., see Nitta, Y. (53)15
 Sundaresan, S., see Arnold, E.W., III (41)225
 Sundmark, G., see Holmen, A. (50)211
 Suzuka, H. and Hattori, H.
 Dehydrocyclodimerization of 1,3-butadiene catalyzed by magnesium oxide and zirconium oxide (47)L7
 Suzuki, K., Kiyozumi, Y., Matsuzaki, K. and Shin, S.
 Effect of crystallization time on the physicochemical and catalytic properties of a ZSM-5 type zeolite (42)35
 Suzuki, K., see Ikai, S. (49)143
 Suzuki, T., Wada, K. and Watanabe, Y.
 Effects of carbon dioxide and catalyst preparation on the oxidative dimerization of methane (59)213
 Suzuki, T., Tanaka, K., Toyoshima, I. and Gotoh, H.
 Ethylene homologation reaction in the presence of metathesis on MoOx/SiO₂ catalyst: Selectively promoted by adding copper (50)15
 Suzuki, T., Wada, K. and Watanabe, Y.
 Oxidative methylation of toluene with methane over alkali metal bromide loaded rare earth oxides (53)L19
 Szabo, S., see Mallat, T. (53)29
 Szanyi, J., see Conway, S.J. (56)149

T

- Takada, T., see Imamura, H. (58)165
 Takaya, H., see Okado, H. (41)121
 Takeuchi, K., Matsuzaki, T., Arakawa, H., Hanaoka, T. and Sugi, Y.
 Synthesis of C₂-oxygenates from syngas over cobalt catalysts promoted by ruthenium and alkaline earths (48)149
 Takezawa, N., see Shimokawabe, M. (59)45
 Tamura, R., see Okazaki, H. (41)99
 Tamura, R., see Okazaki, H. (43)71
 Tanaba, K., see Inoue, T. (46)1
 Tanabe, H., see Itoh, H. (47)L1
 Tanabe, K., Zhang, G. and Hattori, H.
 Addition of metal cations to magnesium oxide catalyst for the aldol condensation of acetone (48)63
 Tanabe, K., see Nakajima, T. (52)237
 Tanabe, K., see Kulkarni, S.J. (49)27
 Tanabe, S. and Matsumoto, H.
 Effect of preliminary treatment with ammonia on the reduction of CuY zeolite (45)27
 Tanaka, H., see Fujikawa, K. (50)199
 Tanaka, K., see Suzuki, T. (50)15
 Tang, X., see Fu, Y. (55)11
 Tang Yi, see Gao Zi (56)83
 Tau, L.-M. and Davis, B.H.
 Acid catalyzed formation of ethyl tertiary butyl ether (ETBE) (53)263
 Tau, L.M., Dabbagh, H.A., Wilson, T.P. and Davis, B.H.
 Fischer-Tropsch synthesis with iron catalysts: Impact of alkali or added alcohol upon catalytic activity and product selectivity (56)95
 Teichner, S.J., see Hoang, C. (46)281
 Tempere, J.F., see Herrmann, J.M. (53)117
 Teraoka, Y., see Zhang, H.M. (41)137
 Terlecki-Baricevic, A., Grbic, B., Jovanovic, D., Angelov, S., Mehandziev, D., Marinova, C. and Kirilov-Stefanov, P.
 Activity and sulphur tolerance of monophase spinels in carbon monoxide and C₂H₄ oxidation (47)141
 Tétényi, P., see Manninger, I. (51)L7
 Thangaraj, A., Kumar, R. and Ratnasamy, P.
 Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium-silicate zeolites (57)L1
 Themistocleous, T., see Hutchings, G.J. (43)133
 Thivolle-Cazat, J., see Chauvin, Y. (42)205
 Thomas, D.J., see Stambach, M.R. (58)209
 Thompson, S.C. and Mathews, J.F.
 Characterization of hydro-cracking catalysts by acidity measurement (47)45
 Thomson, R.T. and Wolf, E.E.
 Hydrocarbon synthesis over palladium/ZSM-5 bifunctional catalysts (41)65
 Tiwari, K.K., Banerji, S.N., A. Bhattacharjee and Bhattacharya, R.N.
 Catalytic hydrodealkylation of tar acids (45)39
 Tofanari, A., see Spinicci, R. (41)241, (44)179
 Tomi, P., see Pop, G. (56)L1
 Tominaga, H., see Fujimoto, K. (50)223
 Tomita, A., see Ohtsuka, Y. (47)303

- Topsøe, H., see Clausen, B.S. (48)327
 Toropainen, P. and B-Son Bredenberg, J.
 Catalytic hydrogenolysis of heteroatom-substituted
 benzenes (52)57
 Touzeyidio, M., see Lemberston, J.L. (54)101
 Touzeyidio, M., see Lemberston, J.L. (54)91
 Toyoshima, I., see Suzuki, T. (50)15
 Tregloan, P.A., see Brown, S.J. (48)1
 Trifiro', F., see Centi, G. (48)13
 Trifiro', F., see Grasselli, R.K. (57)149
 Trimm, D.L., see Stambach, M.R. (58)209
 Trimm, D.L., see Stambach, M.R. (55)93
 Trimm, D.L., see Lee, J.C. (60)173
 Trimm, D.L., see Lee, J.C. (57)215
 Trimm, D.L., see Huang, Y. (56)177
 Trimm, D.L., see Fan, C. (54)53
 Trimm, D.L., see Kotter, M. (52)225
 Trimm, D.L., see Maitra, A.M. (48)187
 Trimm, D.L., see White, A. (56)187
 Tronconi, E., Lietti, L., Forzatti, P. and Pasquon, I.
 Higher alcohol synthesis over alkali metal promoted
 high-temperature methanol catalysts (47)313
 Tronconi, E., see Cristiani, C. (57)253
 Tsai, H.-H., see Kang, B.-C. (45)221
 Tsai, T.-C., Kung, H.-Y., Yu, S.-T. and Chen, C.-T.
 Effects of acid strength of fluid cracking catalysts on
 resid cracking operation (50)1
 Tsang, C.M., Augustine, S.M., Butt, J.B. and Sachtler,
 W.M.H.
 Synthesis and characterization of bimetallic clusters
 prepared by sublimation of $\text{Re}_2(\text{CO})_{10}$ onto Pt/NaY
 (46)45
 Tsang, S.C., see Burch, R. (46)69
 Tsang, S.C., see Baldwin, T.R. (56)219
 Tsang, S.C., see Burch, R. (43)105
 Tseng, P.-K., see Lee, J.-F. (52)193
 Tsigdinos, G.A., see Kastanas, G.N. (44)33
 Tsotsis, T.T., see Nourbakhsh, N. (50)65
 Tsuchida, Y., see Itoh, T. (51)213
 Tsuchiya, S., see Imamura, H. (58)165
 Tsuruya, S., see Nishiyama, S. (47)25
 Tsuruya, S., see Baba, T. (52)81
 Tsuruya, S., see Bun, S. (59)13
 Tsvetanov, C., see Ivanova, P. (53)41
 Tuel, A., see Derouane, E.G. (51)L13
 Turck, T., see Kotter, M. (52)225

U

- Uba, M., see Ishigaki, Y. (47)193
 Uchijima, T., see Kunimori, K. (53)L11
 Uchiyama, S., Ohbayashi, Y., Hayasaka, T. and Kawa-
 ta, N.
 Production of higher alcohols from synthesis gas
 over nickel containing catalysts. Effects of adding
 copper and sodium to coprecipitated NiO/TiO_2
 catalysts (42)143
 Uchiyama, S., Obayashi, Y., Hayasaka, T. and Kawata,
 N.
 Characterization of coprecipitated nickel catalysts:
 Comparison of NiO/SiO_2 and NiO/TiO_2 catalysts
 (47)151
 Ueno, K., see Nitta, Y. (56)9
 Ungar, R.K., Zhang, X. and Lambert, R.M.
 High selectivity catalysts for the oxidative coupling of
 methane. Complex oxides with the rock salt struc-
 ture. (42)L1
 Urbano, P., see Aramendia, M.A. (43)41
 Utsumi, Y., see Matsuura, I. (47)295

V

- Vaidyeswaran, R., see Salvapati, G.S. (48)223
 Valentine, N., see Chaffee, A.L. (47)249
 Valix, M., see Stambach, M.R. (55)93
 Vallet, A., see Kiennemann, A. (59)165
 Van Bekkum, H., see Maesen, T.L.M. (48)373
 Van Bekkum, H., see Voogd, P. (59)311
 Van Buren, F.R., see Meima, G.R. (44)133
 Van der Beek, A., see Heveling, J. (42)325
 Van der Grift, C.J.G., Elberse, P.A., Mulder, E.A. and
 Geus, J.W.
 Preparation of silica-supported copper catalysts by
 means of deposition-precipitation (59)275
 Van der Grift, C.J.G., Mulder, A. and Geus, J.W.
 Characterization of silica-supported copper cata-
 lysts by means of temperature-programmed reduc-
 tion (60)181
 Van der Kraan, A.M., see Ramselaar, W.L.T.M.
 (51)263
 Van der Kraan, A.M., see Ramselaar, W.L.T.M.
 (54)217
 Van der Kraan, A.M., see Ramselaar, W.L.T.M.

- (42)153
- Van der Steen, P.J., Scholten, J.J.F.
Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. I. Adsorption of the reduction modifiers, water and ϵ -caprolactam on ruthenium (58)281
- Van der Steen, P.J., Scholten, J.J.F.
Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. II. Catalytic hydrogenation of benzene to cyclohexene and cyclohexane (58)291
- Van der Wiele, K., see Boelee, J.H. (53)1
- Van Dillen, A.J., see Meima, G.R. (44)133
- Van Doorn, J., Staugaard, P., Moulijn, J.A. and De Beer, V.H.J.
Novel type of carbon-supported catalysts. I. Preparation and characterization (48)253
- Van Doorn, J., Wakker, J.P., Moulijn, J.A. and De Beer, V.H.J.
Novel type of carbon-supported catalysts. II. Activity measurements (49)319
- Van Duijn, G., see Colen, G.C.M. (43)339
- Van Hardeveld, R., Glasz, W.C. and Van Lieshout, L.H.W.
Automated testing of methanol synthesis catalysts (43)301
- Van Leur, M.G.J., see Meima, G.R. (44)133
- Van Lieshout, L.H.W., see Van Hardeveld, R. (43)301
- Van Oeffelt, P.H., see Luys, M.J. (46)161
- Van Oers, E.M., see Ramselaar, W.L.T.M. (51)263
- Van Oers, E.M., see Arnold, P. (48)241
- Van Ommen, J.G., see Korf, S.J. (56)119
- Van Ommen, J.G., see Korf, S.J. (58)131
- Van Ommen, J.G., see Roos, J.A. (52)147
- Van Ommen, J.G., see Korf, S.J. (59)291
- Van Ommen, J.G., see Mercera, P.D.L. (57)127
- Van Ommen, J.G., see Lansink Rotgerink, H.G.J. (45)239
- Van Ommen, J.G., see Lansink Rotgerink, H.G.J. (45)281
- Van Ommen, J.G., see Lansink Rotgerink, H.G.J. (45)257
- Van Ommen, J.G., see Roos, J.A. (52)131
- Van Oosten, H.J., see Colen, G.C.M. (43)335
- Van Ours, E.M., see Arnold, P. (48)241
- Vanderveken, D.J., see Derouane, E.G. (45)L15
- Vannice, M.A., see Plischke, J.K. (42)255
- Vannice, M.A., see Martin-Martinez, J.M. (51)93
- Vasalos, I.A., see Lemonidou, A.A. (54)119
- Vassileva, M., Andreev, A., Dancheva, S. and Kotsev, N.
Complete catalytic oxidation of benzene over supported vanadium oxides modified by palladium (49)125
- Vechof, R.H.J., see Roos, J.A. (52)147
- Vechof, R.H.J., see Roos, J.A. (52)131
- Veijux, A., see Oudet, F. (50)79
- Veltman, L.J., see Korf, S.J. (56)119
- Venkat Rao, V., Durga Kumari, V. and Narayanan, S.
Selective alkylation of phenol to 2,6-xyleneol over vanadia-chromia mixed oxide catalysts (49)165
- Verderone, R.J., see Pieck, C.L. (56)1
- Verderone, R.J., see Pieck, C.L. (55)1
- Verykios, E., see Lee, J.K. (50)171
- Verykios, X.E., see Lee, J.K. (44)223
- Verykios, X.E., see Akubuiro, E.C. (46)297
- Villa Garcia, M.A., Lindner, J., Sachdev, A. and Schwank, J.
Model hydrodesulfurization catalysts: solid state synthesis and characterization of iron containing molybdenum sulphide (56)281
- Viniegra, M., Arroyo, V. and Gómez, R.
Ruthenium-palladium catalysts: The effect of palladium on the catalytic behaviour of ruthenium (44)L1
- Vink, J., see Nicolaides, C.P. (55)259
- Viola, A., see Cao, G. (41)301
- Vit, Z., see Sobczak, J. (45)L23
- Vit, Z., see Spojakina, A. (56)163
- Völter, J., Caro, J., Bülow, M., Fahlke, B., Kärger, J. and Hunger, M.
Diffusion, cracking and coking on HZSM-5 of various morphologies (42)15
- Volter, J., see Lietz, G. (45)71
- Volter, J., see Kürschner, U. (57)167
- Von Ballmoos, R., see Derouane, E.G. (51)L13
- Voogd, P., and Van Bekkum, H.
Limitation of n-hexane and 3-methylpentane conversion over zeolite ZSM-5 by intracrystalline diffusion (59)311
- Vreeman, J.A., see Korf, S.J. (59)291
- Vrinat, M., see Ramirez, J. (52)211
- Vuori, A., Helenius, A. and B-Son Bredenberg, J.
Influence of sulphur level on hydrodeoxygenation (52)41

W

- Wada, K., see Suzuki, T. (53)L19
 Wada, K., see Suzuki, T. (59)213
 Wada, S., Tagawa, T. and Imai, H.
 Kinetics and mechanism of oxidative coupling of methane over lanthanum-boron oxide (47)273
 Wainwright, M.S., see Stambach, M.R. (58)209
 Wainwright, M.S., see Lee, J.C. (57)215
 Wainwright, M.S., see Lee, J.C. (60)173
 Wainwright, M.S., see Fan, C. (54)53
 Wainwright, M.S., see Stambach, M.R. (55)93
 Wakker, J.P., see Van Doorn, J. (49)319
 Walendziewski, J.
 Thermal stability of Co-Mo/Al₂O₃ hydrosulphurization catalyst (52)181
 Walker, D.W., see Moyes, R.B. (55)L5
 Walpole, A., see White, A. (56)187
 Walpole, A., see Huang, Y. (56)177
 Wang, I., Ay, C.-A., Lee, B.-J. and Chen, M.-W.
 Para-selectivity of dialkylbenzenes over modified HZSM-5 by vapour phase deposition of silica (54)257
 Wang, I., see Lin, Y.-M. (41)53
 Wang, J., see Ren, Z.-X. (49)83
 Wang, P.-J. and Chen, Y.-W.
 Deactivation of iron oxide-iron phosphate catalyst in isopropanol dehydration (55)181
 Wang, R., see Qi, Y. (53)63
 Wang, S., see Shen, Y. (57)55
 Wang, W.-J., see Chen, Y.-W. (49)45
 Wang, W.-X. and Li, F.
 Influence of water soaking on the structure and properties of fused-iron catalyst for ammonia synthesis (55)3
 Wang, Z., see Qi, Y. (53)63
 Watanabe, Y., see Suzuki, T. (53)L19
 Watanabe, Y., see Suzuki, T. (59)213
 Waugh, K.C.
 In situ study of catalysts. Application in methanol synthesis and ethylene epoxidation
 Webb, G., see Rowley, L. (52)69
 Webster, I.A., see Nourbakhsh, N. (50)65
 Wehrli, J.T., see Blaser, H.U. (52)19
 Weitkamp, J., see Ernst, S. (48)137
 Wells, P.B., see Moyes, R.B. (55)L5
 Wen-Ben Li, see Ding-Zhu Wang (59)75
 Wendlinger, L., see Blanchard, M. (59)123
 Wendt, G., Meinecke, C.-D. and Schmitz, W.
 Oxidative dimerization of methane on lead oxide-alumina catalysts (45)209
 Weng, L.-T., see Qiu, F.-Y. (47)113
 Weng, L.-T., see Qiu, F.-Y. (51)235
 Whan, D.A., see Moyes, R.B. (55)L5
 White, A., Walpole, A., Huang, Y. and Trimm, D.L.
 Control of porosity and surface area in alumina: II. Alcohol and glycol additives (56)187
 White, A., see Huang, Y. (56)177
 Wichterlova, B., see Kapustin, G.I. (42)239
 Wicker, W., see Martin, A. (57)203
 Wiele, J. van der, see Boelee, J.H. (53)1
 Wierzchowski, P.T., see Bonnier, J.M. (53)217
 Wiesgickl, G., Beck, H.P. and Emig, G.
 Novel type of catalyst for the pure dehydrogenation of methanol to formaldehyde (59)L1
 Wilde, M., see Engels, S. (55)93
 Willis, W.S., see Altomare, C.A. (45)291
 Wilson, M.F., Mainwaring, P.R., Brown, J.R. and Kriz, J.F.
 Large pore nickel/silica-alumina catalysts for hydrogenation of synthetic distillates. Effects of composition and structure (41)177
 Wilson, T.P., see Tau, L.M. (56)95
 Wind, M. de, see De Wind, M. (43)239
 Winfield, J.M., see Rowley, L. (52)69
 Wojciechowski, B.W., see Egiebor, N.O. (55)47
 Wolcyrz, M., see Kepinsky, L. (54)267
 Wolf, E.E., see Lane, G.S. (53)183
 Wolf, E.E., see Thomson, R.T. (41)65
 Wong, S.T., Howe, R.F. and Milestone, N.B.
 Carbon monoxide hydrogenation over metal loaded aluminophosphates (47)225
 Wrzyszc, J., see Grabowska, H. (47)347
 Wu, J.-C., see Kang, B.-C. (45)221
 Wu, S.-T., see Kang, B.-C. (45)221

X

- Xenophon, L., see Lee, J.K. (50)171
 Xiu-Yu Dou, see Ding-Zhu Wang (59)75
 Xu Xian Lun, see Manninger, I., (51)L7
 Xue, J., Huang, Y.-J. and Schwarz, J.A.
 Interaction between iridium and platinum precursors in the preparation of iridium platinum catalysts (42)61
 Xue-Dong Lu, see Ding-Zhu Wang (59)75

Y

Yagita, H., Asami, K., Muramatsu, A. and Fujimoto, K.
Oxidative dimerization of dimethyl ether with solid catalysts (53)L5

Yahav, G., see Sheintuch, M. (49)55

Yamaguchi, T., see Nakajima, T. (52)237

Yamazoe, N., see Zhang, H.M. (41)137

Yamazoe, N., see Hidaka, S. (43)57

Yanagi, H., see Nishiyama, S. (47)25

Yarlagadda, P., Lund, C.R.F. and Ruckenstein, E.
Conversion of methanol to hydrocarbons over silica-alumina. Selective formation of lower olefins (54)139

Yarlagadda, P.S., see Hunter, N.R. (57)45

Yeh, C.-T., see Hong, C.-T. (48)385

Yeh, C.-T., see Lin, Y.-M. (41)53

Yermakov, Yu.I., see Lisitsyn, A.V. (55)235

Yermakov, Yu.I., see Startsev, A.N. (45)183

Yermakov, Yu.I., see Startsev, A.N. (45)191

Yokota, K., see Muraki, H. (48)93

Yokota, Y., see Abe, H. (52)171

Yong, Y.S. and Cant, N.W.

Comparative study of nitrous oxide and oxygen as oxidants for the conversion of ethylene to ethylene oxide over silver (48)37

Yori, J.C., Luy, J.C. and Parera, J.M.

Surface acidity, catalytic activity and selectivity of some oxides supported on alumina (41)1

Yori, J.C., Luy, J.C. and Parera, J.M.

Deactivation of H-mordenite and ZrO_2/SO_2^{4-} during n-butane isomerization (46)103

Yoshida, Y., see Matsuura, I. (47)295

Yu, F.-H., see Hong, C.-T. (48)385

Yu Qing Li, see Zhen Xiang Liu (56)207

Yu, S.-T., see Tsai, T.C. (50)1

Yu, T.-C. see Huang, T.-J. (52)157

Z

Zaikovskii, V.I., see Ryndin, Yu.A. (54)277

Zanderighi, G.M., see Dossi, C. (46)145

Zarochak, M.F., see Baltrus, J.P. (48)199

Zdrazil, M., see Sobczak, J. (45)L23

Zeilinger, H., see Rajadhyaksha, R.A. (51)67

Zhang, G., see Ayame, A. (48)25

Zhang, G., see Tanabe, K. (48)63

Zhang, H.M., Teraoka, Y. and Yamazoe, N.

Preparation of supported $La_{1-x}Sr_xMnO_3$ catalysts by the citrate process (41)137

Zhang, X., see Ungar, R.K. L1

Zhen Xiang Liu, Yu Qing Li, Shang Xie Qi, Kan Xie, Nai Juan Wu and Qi Xun Bao

Segregation and chemical state of vanadium and molybdenum in vanadium-molybdenum oxide catalyst studied by X-ray photoelectron spectroscopy (56)207

Zhu, J. and Andersson, S.L.T.

Effect of water on the catalytic oxidation of toluene over vanadium oxide catalysts (53)251

Zhu Yugin, see Gao Zi (56)83

SUBJECT INDEX

VOLUMES 41-60

A

Acetal formation

Formation and hydrolysis of acetals catalysed by acid faujasites (59)333

Acetal hydrolysis

Formation and hydrolysis of acetals catalysed by acid faujasites (59)333

Acetic acid

Methyl formate as a new building block in C₁ chemistry — a review (57)1

Acetone

Base properties of modified γ -alumina (56)253

Acetone hydrogenation

Design and study of catalysts for selective hydrogenation (53)63

Acetophenone

Catalytic hydrogenation on Raney nickel catalyst modified by chromium hydroxide deposition (49)91

Reduction of acetophenone with palladium catalysts by hydrogen transfer and with molecular hydrogen (43)41

Acetophenone hydrogenation

Structure of Raney nickel catalysts modified by chromium hydroxide deposition (56)57

Unique bimetallic nickel-chromium and nickel-molybdenum catalysts for hydrogenation in the liquid phase (53)217

Acetoxylation

Gas-phase acetoxylation of 1,3-butadiene over palladium catalysts. V. X-ray photoelectron spectroscopic study of Pd-Sb-V-CsCl-KOAc catalyst (50)119

Acetylene hydrochlorination

Vapour phase hydrochlorination of acetylene with group VIII and IB metal chloride catalysts (43)33

Acetylene hydrogenation

Effect of Pd/C dispersion on its catalytic properties in acetylene and vinylacetylene hydrogenation (54)277

Acid catalyst

Determination of framework concentrations of gallium in [Ga]-ZSM-5 (54)177

Catalytic hydroprocessing of simulated coal tars. II. Effect of acid catalysts on the hydroconversions of model compounds on a sulphided Ni-Mo/Al₂O₃ catalyst (54)101

Acid catalyzed formation of ethyl tertiary butyl ether (ETBE) (53)263

Acid properties

Acid-leached dealuminated mordenite: effect of acid concentration on catalyst life in methanol conversion (53)169

Acid sites

Hydroxyl groups in phosphorus-modified HZSM-5 (53)299

Oxidative coupling of methane over alkali-doped antimony oxide (53)71

Oxidative coupling of methane over alkali-doped antimony oxide (53)71

Formation and hydrolysis of acetals catalysed by acid faujasites (59)333

Extraction of extra-framework aluminium in ultra-stable Y zeolites by (NH₄)₂SiF₆ treatments. I. Physico-chemical characterization (59)267

Solid catalyst treated with anion: XIX. Synthesis of the solid superacid catalyst of tin oxide treated with sulfate ion (59)205

Solid catalyst treated with anion: XVIII. Benzoylation of toluene with benzoyl chloride and benzoic anhydride catalysed by solid superacid of sulfate-supported alumina (59)197

Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization (57)167

Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts (57)31

Acid strength

Determination of the number and acid strength of acid sites in zeolites by ammonia adsorption. Comparison of calorimetry and temperature-programmed desorption of ammonia (42)239

Effects of acid strength of fluid cracking catalysts on resid cracking operation (50)1

Acid-base catalysis

Methanol conversion on aluminophosphates with zeolite structure (42)1

Acid-base properties

Aluminium phosphate-zirconia catalysts I. Structure, texture, acid-base properties and catalytic activity in cyclohexene isomerization of catalysts with propylene oxide (53)135

Acidity

Acidic properties of ZSM-5 zeolite and conversion of ethanol to diethyl ether (41)13

Adsorption mechanism of phosphorus on alumina (41)261

Effect of nickel on the surface acidity of γ -alumina and alumina-supported nickel-molybdenum hydrotreating catalysts (50)237

Surface acidity, catalytic activity and selectivity of some oxides supported on alumina (41)1

Selective alkylation of phenol to 2,6-xyleneol over vanadia-chromia mixed oxide catalysts (49)165

Isomerization of *o*-dichlorobenzene over H-mordenite. Effect of the silicon-to-aluminium ratio (51)285

Effect of acidity of HZSM-5 type zeolite on conversion of alkenes and alkanes to gasoline and aromatics (59)75

Co-impregnation of rhodium into alumina honeycombs with acids and salts (56)107

Acrylamide

Metal-support effects in copper catalysts for the liquid phase hydrolysis of acrylonitrile (60)173

Acrylamide synthesis

ESCA study of copper catalysts used for the hydration of acrylonitrile to acrylamide (47)339

Pelleted copper ion-exchanged silica catalysts for the hydrolysis of acrylonitrile to acrylamide (55)109

Acrylic Acid

Preparation of high-surface-area titanium-vanadium binary pyrophosphate catalysts (48)51

Acrylonitrile hydration

ESCA study of copper catalysts used for the hydration of acrylonitrile to acrylamide (47)339

Acrylonitrile hydrolysis

Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects (57)215

Pelleted copper ion-exchanged silica catalysts for the hydrolysis of acrylonitrile to acrylamide (55)109

Metal-support effects in copper catalysts for the liquid phase hydrolysis of acrylonitrile (60)173

Active sites

Titration of active sites for partial oxidation of methanol over V_2O_5/SnO_2 and MoO_3/SnO_2 catalysts by a low-temperature oxygen chemisorption technique (55)L1

Acylation

Design of synthetic zeolites as catalysts in organic reactions: Acylation of anisole by acyl chlorides or carboxylic acids over acid zeolites (49)109

Adipic acid

Liquid-phase oxidation of cyclohexanone to adipic acid catalysed by cobalt and bromide ions in acetic acid (42)247

Adsorption

Adsorption mechanism of phosphorus on alumina (41)261

Diffusion, cracking and coking on HZSM-5 of various morphologies (42)15

Effect of pretreatment on the adsorption properties of silver crystallites (42)255

Catalytic hydrodealkylation of tar acids (45)39

The role of tin in supported rhodium-tin bimetallic catalysts (47)25

Characterization of chlorine-treated alumina surfaces (48)25

Influence of sulphur level on hydrodeoxygenation (52)41

- Catalytic hydrogenolysis of heteroatom-substituted benzenes (52)57
- Design and study of catalysts for selective hydrogenation (53)63
- Potassium promotion of Ni/Al₂O₃ catalyst (54)159
- Determination of framework concentrations of gallium in [Ga]-ZSM-5 (54)177
- Metallic area of supported iridium catalysts (54)203
- Adsorption and oxidative adsorption of sulfur dioxide on γ -alumina (55)193
- Co-impregnation of rhodium into alumina honeycombs with acids and salts (56)107
- Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects (57)215
- C₂ oxygenate synthesis from CO hydrogenation on AgRh/SiO₂ (57)241
- Ethanol conversion over ion-exchanged ZSM-5 zeolites (59)13
- Adsorption studies of different reagents on supported palladium catalysts (60)1
- Studies of molybdena-alumina catalysts. XV. Effect of fluorine-modified alumina on catalyst properties (49)247
- Hydrogenation of 1,3-butadiene on Pt(111). Comparison with results on Pt(110) and Pt(100) (43)177
- Influence of the level of dealumination on the selective adsorption of olefins and paraffins and its implication on hydrogen transfer reactions during catalytic cracking on USY zeolites (47)123
- Heats of adsorption and mass transfer coefficients of alkanes in zeolites Y and ZSM-20 (53)273
- Effect of support material on the adsorption structures of furan and maleic anhydride on the surface of V₂O₅/P₂O₅ catalysts. II. Results of in situ infrared spectroscopic studies (45)9
- Design of synthetic zeolites as catalysts in organic reactions: Acylation of anisole by acyl chlorides or carboxylic acids over acid zeolites (49)109
- Activation of zeolite- Ω . I. Physicochemical characterization of calcined and self-steamed samples (42)105
- Support and alkali promotion effects on the surface chemistry of nickel/silica catalysts (44)105
- Synthesis of motor fuels from HY-zeolite supported Fischer-Tropsch iron catalysts (55)47
- Semiconductivity study of ceria-supported nickel related to its methanation catalytic activity (53)117
- Coal liquefaction using an intermetallic hydride to distribute hydrogen and catalyze the reaction (44)53
- Comments on "diffusion of alkanes in molecular sieves: Evidence for confinement effects" (52)165
- Reply to "comments on diffusion of alkanes in molecular sieves: Evidence for confinement effects" (52)169
- Kinetic study of the low-temperature water-gas shift reaction over a Cu-ZnO catalyst (49)285
- Magic-angle-spinning nuclear magnetic resonance and adsorption studies of dealumination and realumination of zeolite ZSM-5 (56)L15
- Characterization of copper/alumina catalysts prepared by deposition-precipitation using urea hydrolysis. I. Nitrous oxide decomposition and reaction of ethanol (45)103
- Characterization of nickel catalysts by chemisorption techniques, X-ray diffraction and magnetic measurements. Effects of support, precursor and hydrogen pretreatment (46)281
- Temperature-programmed desorption studies on Pd/CeO₂ after methanol and formic acid adsorption and carbon monoxide-hydrogen reaction (50)43
- Characterization of γ -alumina-supported Tungsten sulfide hydroprocessing catalysts. I. Low-temperature oxygen chemisorption (41)165
- PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. II. Water poisoning (43)15
- Study of supported iridium catalysts by hydrogen-oxygen titrations. Influence of the support (58)175
- Ammonia adsorption on vanadia supported on titania-silica catalyst. An infrared spectroscopic investigation (51)81
- Limitation of n-hexane and 3-methylpentane conversion over zeolite ZSM-5 by intracrystalline diffusion (59)311
- Flue gas desulphurisation: Catalytic removal of sulphur dioxide by carbon monoxide on sulphided La_{1-x}Sr_xCoO₃. I. Adsorption of sulphur dioxide, carbon monoxide and their mixtures (41)273

Valency and adsorption characteristics of a sulphided $\text{MoO}_3/\gamma\text{-Al}_2\text{O}_3$ methanation catalyst (55)11

Selective hydrogenation of neat isouquinoline. II. Reaction pathway over Raney nickel (43)71

Effect of phosphorus on the surface state of alumina-supported nickel-molybdenum catalysts for hydrodesulphurization (56)163

Surface and sub-surface oxidation of copper and supported copper catalysts by nitrous oxide (46)161

Effect of dispersion of supported palladium on its electronic and catalytic properties in the hydrogenation of vinylacetylene (42)131

Calorimetric study of the coadsorption of hydrogen and carbon monoxide over ruthenium graphitized carbon black catalysts (55)21

Influence of the precursor and the support on the catalytic properties of ruthenium for alkane hydrogenolysis (60)33

Slow uptake of oxygen and carbon monoxide by platinum/silica (EUROPT-1) and subsequent effects on hydrogenation of benzene and hydrogenolysis of methylcyclopentane (42)337

Effect of particle size and the reactivity of oxygen-adsorbed platinum supported on alumina
Radiotracers in fluorine chemistry. XIII. Catalysis by fluorinated surfaces: The interaction of [^{36}Cl]-chlorine labelled hydrogen chloride and 1,1-dichlorotetrafluoroethane with fluorinated chromia catalysts (52)69

Studies of molybdena-alumina catalysts. XVII. sulfided catalysts exposed to air (58)199

Titration of active sites for partial oxidation of methanol over $\text{V}_2\text{O}_5/\text{SnO}_2$ and $\text{MoO}_3/\text{SnO}_2$ catalysts by a low-temperature oxygen chemisorption technique (55)L1

Investigation of the effect of water and oxygen on the reaction of propylene with cobalt oxide-magnesium oxide solid solutions. I. Thermodesorption study (50)27

Investigation of the effect of water and oxygen on the reaction of propylene with cobalt oxide-magnesium oxide solid solutions. II. IR spectroscopic study (50)37

Ageing

Performance of the Minilith — A shaped hydrometallation catalyst (42)47

Effects of sintering on the active site distribution on promoted catalysts (45)115

Regeneration of spent hydroprocessing catalysts: Metals removal (47)83

Automotive exhaust gas catalysts: Surface structure and activity (48)71

Manganese oxide water-gas shift catalysts. Initial optimization studies (51)127

Influence of sulphur level on hydrodeoxygenation (52)41

Analytical electron microscopy of a vehicle-aged automotive catalyst (53)233

Coking and deactivation of zeolites — a review (54)1

Influence of phosphorus in vanadium-containing catalysts for NO_x removal (55)151

Cracking reactions of C_6 paraffins on HZSM-5 (57)105

Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects (57)215

Hydrogenation of ethyne over an ion-exchanged copper on silica catalyst (58)209

Activity and thermoresistance of fused iron catalysts for ammonia synthesis (58)29

Oxidative coupling of methane over Ba/CaO catalysts. A comparison with Li/MgO (59)291

Pelleted copper ion-exchanged silica catalysts for the hydrolysis of acrylonitrile to acrylamide (55)109

Carbon-supported, (alkali metal) $(\text{Fe}_2\text{Mn}(\text{CO})_{12})$ -derived catalysts. Adsorption properties and catalytic behavior in carbon monoxide hydrogenation (51)93

Catalytic storage of hydrogen: Hydrogenation of toluene over a nickel/silica aerogel catalyst in integral flow conditions (42)121

Methanol formation at high pressure by the catalyzed oxidation of natural gas and by the sensitized oxidation of methane (57)45

Activity and sulphur tolerance of monophase spinels in carbon monoxide and C_xH_y oxidation (47)141

Low-temperature hydrocarbon conversion over rare-earth-exchanged zeolite X catalyst (42)169

Electron microscopy study of a rejuvenated vehicle-aged automotive exhaust catalyst (56)45

Kinetic model of nitrobenzene hydrogenation to aniline over industrial copper catalyst considering the effects of mass transfer and deactivation (59)31

Effect of water on the catalytic oxidation of toluene over vanadium oxide catalysts (53)251

The state of metallic phase in alumina-supported platinum-chromium catalysts (55)93

Analytical electron microscopy study of two vehicle-aged automotive exhaust catalysts having dissimilar activities (56)23

Effect of hydrothermal treatment on alumina as support for noble metal catalysts (59)89

Production of higher alcohols from synthesis gas over nickel containing catalysts. Effects of adding copper and sodium to coprecipitated NiO-TiO₂ catalysts (42)143

Semiconductivity study of ceria-supported nickel related to its methanation catalytic activity (53)117

Effect of Na⁺ on sulphation and related reactions over a commercial Claus alumina catalyst (43)167

Novel methanol synthesis catalysts derived from inter-metallic precursors: CO₂ poisoning and molecular mechanism of the synthesis reaction (50)157

Effect of thermal treatment on the sintering and structural changes of cobalt-molybdenum/alumina and nickel-molybdenum/alumina hydrotreating catalysts (41)109

Model planar alumina catalyst preparation and aging under hydrotreating conditions (50)65

Kinetic study of hydrogen transfer of olefins under catalytic cracking conditions (58)35

Influence of cerium on the catalytic properties of ZSM-20 zeolite in the cracking of n-heptane: Comparison with rare earth Y zeolites (49)175

Coking and regeneration of zeolite catalysts in fixed beds during cumene cracking (58)53

Coking, ageing and regeneration of zeolites. XI. Coke formation and deactivation of Pt-ultrastable zeolite HY and PtH-mordenite catalysts during hydrogenation of benzene (58)189

Chemical and structural changes of Na₂MoO₄ as a methanol dehydrogenation catalyst (57)83

Para-selectivity of dialkylbenzenes over modified HZSM-5 by vapour phase deposition of silica (54)257

Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts — a review (57)149

Effect of catalyst composition on the hydrodesulphurization and hydrometallization of atmospheric residual oil (45)221

PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. I. Preparation and characterization (43)1

Methanol conversion to hydrocarbons using modified clinoptilolite catalysts: Investigation of catalyst lifetime and reactivation (43)133

Product distributions of the Fischer-Tropsch synthesis on precipitated iron catalysts (52)93

Acid-leached dealuminated mordenite: effect of acid concentration on catalyst life in methanol conversion (53)169

Effect of crystallization time on the physicochemical and catalytic properties of a ZSM-5 type zeolite (42)35

Activity decay of potassium-promoted iron oxide catalyst for dehydrogenation of ethylbenzene (51)203

Effect of silicon-to-aluminium ratio and synthesis time on high-pressure olefin oligomerization over ZSM-5 (56)263

Catalytic properties of lithium carbonate melts and related slurries for the oxidative dimerization of methane (56)149

Lithium chemistry of lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (58)131

Structure and selectivity changes in vanadia-titania catalysts used to promote the reduction of nitric oxide with ammonia (52)225

Evolution during thermal treatment of pure and lanthanum-doped Pt/Al₂O₃ and Pt-Rh/Al₂O₃ automotive exhaust catalysts: Transmission electron microscopy studies on model samples (50)79

Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. II. Catalytic hydrogenation of benzene to cyclohexene and cyclohexane (58)291

Radiotracers in fluorine chemistry. XIII. Catalysis by fluorinated surfaces: The interaction of [³⁶Cl]-chlorine labelled hydrogen chloride and 1,1-dichlorotetrafluoroethane with fluorinated chromia catalysts (52)69

Effect of acidity of HZSM-5 type zeolite on conversion of alkenes and alkanes to gasoline and aromatics (59)75

Methanol and dimethyl ether conversion to hydrocarbons using tungsten trioxide/alumina as catalyst. A study of catalyst reactivation (41)253

Fibrillar alumina as a wash-coat on monoliths in the catalytic oxidation of xylene (55)123

Methanol synthesis catalysts derived from ternary rare earth, copper, zirconium and rare earth, copper, titanium intermetallic alloys (58)69

Air

Studies of molybdena-alumina catalysts. XVII. sulfided catalysts exposed to air (58)199

Alcohol

The selectivity problem in the homogeneous carbonylation and hydrocarbonylation of alcohols and esters — A review (50)99

Control of porosity and surface area in alumina: II. Alcohol and glycol additives (56)187

Fischer-Tropsch synthesis with iron catalysts impact of alkali or added alcohol upon catalytic activity and product selectivity (56)95

Alcohol synthesis

Synthesis of alcohols from carbon oxides and hydrogen. XVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn-Cr-O systems in the synthesis of alcohols from carbon monoxide and hydrogen (57)253

Alcohol synthesis from syngas on group VIII metal catalysts promoted by Mo-Na₂O (49)213

Synthesis of higher alcohols over copper/cobalt catalysts. Influence of preparative procedures on the activity and selectivity of Cu/Co/Zn/Al mixed oxide catalysts (53)279

Higher alcohols synthesis from CO + 2H₂ on cobalt-copper catalysts. Use of probe molecules and chemical trapping in the study of the reaction mechanism (53)197

Aldehyde condensation

Zeolites as base catalysts: Condensation of aldehydes with derivatives of malonic esters (59)237

Aldehyde hydrogenation

Selective hydrogenation of α,β -unsaturated aldehydes on cobalt-silica catalysts obtained from cobalt chrysothile (56)9

Aldol condensation

Preparation of high-surface-area titanium-vanadium binary pyrophosphate catalysts (48)51

Addition of metal cations to magnesium oxide catalyst for the aldol condensation of acetone (48)63

Effect of the composition of vanadium-titanium binary phosphate on catalytic performance in vapor-phase aldol condensation (54)29

Reaction of acetic acid with methanol over vanadium-titanium binary phosphate catalysts in the presence of oxygen (59)227

Aldolisation

Transformation of ethanol into 1,3-butadiene over magnesium oxide/silica catalysts (43)117

Alkali

Fischer-Tropsch synthesis with iron catalysts impact of alkali or added alcohol upon catalytic activity and product selectivity (56)95

Alkali metal bromide

Oxidative methylation of toluene with methane over alkali metal bromide loaded rare earth oxides (53)L19

Alkali metal catalysts

Catalytic gasification of carbon: Method for the determination of the activity of alkali metal catalysts in the gasification of highly pure amorphous and graphitic carbons with steam (50)199

Alkali metals

Mechanism for coking of coal liquefaction catalysts involving basic nitrogen compounds, sodium and catalyst acid sites (44)199

Thermal stability of alkali metals deposited on oxide supports and their influence on the surface area of the support (42)217

Alkali promotion

Support and alkali promotion effects on the surface chemistry of nickel/silica catalysts (44)105

Alkaline earth metal halides

Selective oxidative coupling of methane over supported alkaline earth metal halide catalysts (50)223

Alkaline earth metal oxides

Hexane-carbon dioxide reaction catalyzed by alkaline earth metal oxides. II. Reaction network (41)199

Alkaline earth metal salts

Inorganic salt catalysis in the process for the conversion of alcohols/alkylphenols into ethoxychloride surfactant intermediates (46)313

Alkaline earth metals

Deactivation resistance of ZSM-5 type zeolites containing alkaline earth metals used for methanol conversion (41)121

Alkaline earth oxide

Role of carbon tetrachloride in the conversion of methane on silica-supported alkali metal added alkaline earth oxide catalysts (58)83

Alkane cracking

Role of Brønsted and Lewis acid sites during cracking reactions of alkanes (47)33

Cracking of C₉ paraffins over xylene isomerization catalysts (57)179

Alkane hydrogenolysis

Influence of the precursor and the support on the catalytic properties of ruthenium for alkane hydrogenolysis (60)33

Alkene cracking

Effect of silicon-to-aluminum ratio and template on the cracking of C₆-C₈ alkenes over ZSM-5 zeolite (60)87

Alkene hydrogenation

Hydroisomerization of branched-chain olefins over Pt/H-ZSM-5 zeolite (47)67

Alkene oligomerization

Kinetic and mechanistic studies of nickel-catalysed olefin oligomerization (48)1

Alkylation

Selective alkylation of alkylbenzenes in the presence of HZSM-5 zeolites (49)101

Alkylation of benzene with 2-chloropropane on chlorine-treated alumina (56)73

Effects of pH during preparation on the physico-chemical, acidity and catalytic properties and coking tendencies of HZSM-5-type catalysts (49)27

Para-selectivity of dialkylbenzenes over modified HZSM-5 by vapour phase deposition of silica (54)257

Selective alkylation of phenol to 2,6-xyleneol over vanadia-chromia mixed oxide catalysts (49)165

Alkylbenzenes

Selective alkylation of alkylbenzenes in the presence of HZSM-5 zeolites (49)101

Alumina

Adsorption mechanism of phosphorus on alumina (41)261

Characterization of chlorine-treated alumina surfaces (48)25

Adsorption and oxidative adsorption of sulfur dioxide on γ -alumina (55)193

Surface changes of alumina induced by phosphoric acid impregnation (56)197

Base properties of modified γ -alumina (56)253

Solid catalyst treated with anion: XVIII. Benzoylation of toluene with benzoyl chloride and benzoic anhydride catalysed by solid superacid of sulfate-supported alumina (59)197

Effect of Na⁺ on sulphation and related reactions over a commercial Claus alumina catalyst (43)167

Control of porosity and surface area in alumina: I. Effect of preparation conditions (56)177

Thermal stability of alkali metals deposited on oxide supports and their influence on the surface area of the support (42)217

Study of supported iridium catalysts by hydrogen-oxygen titrations. Influence of the support (58)175

Study of structural and mechanical properties of granulated alumina supports using X-ray microprobes (55)75

Alumina films

Model planar alumina catalyst preparation and aging under hydrotreating conditions (50)65

Aluminium phosphate-zirconia

Aluminium phosphate-zirconia catalysts I. Structure, texture, acid-base properties and catalytic activity in cyclohexene isomerization of catalysts obtained with propylene-oxide (53)135

Aluminophosphates

Methanol conversion on aluminophosphates with zeolite structure (42)21

Carbon monoxide hydrogenation over metal loaded aluminophosphates (47)225

The very large pore molecular sieve VPI-5: an aluminophosphate-hydrate! (56)L21

Amberlist

Acid catalyzed formation of ethyl tertiary butyl ether (ETBE) (53)263

Amination catalysts

Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine (52)171

Amine titration

Characterization of hydro-cracking catalysts by acidity measurements (47)45

Amines

Hydrodenitrogenation of simple aromatic amines on molybdena catalysts (46)241

Amino alcohol cyclization

Synthesis of cyclic amines and their alkyl derivatives from amine alcohols over supported copper catalysts (53)107

Ammonia adsorption

Determination of the number and acid strength of acid sites in zeolites by ammonia adsorption. Comparison of calorimetry and temperature-programmed desorption of ammonia (42)239

Ammonia adsorption on vanadia supported on titania-silica catalyst. An infrared spectroscopic investigation (51)81

Ammonia-hydrazine conversion processes. XVI. Conversion of benzophenone azine into hydrazine catalyzed by sulphonic acids in a two-phase system (41)213

Ammonia preadsorption

Influence of the support towards platinum catalysed 1,3-butadiene hydrogenation (58)241

Ammonia pretreatment

Effect of preliminary treatment with ammonia on the reduction of CuY zeolite (45)27

Ammonia synthesis

Hydrodenitrogenation of simple aromatic amines on molybdena catalysts (46)241

Ammonia synthesis over ruthenium supported catalysts derived from Ru₃(CO)₁₂ (53)L1

Iron complexes used for the preparation of zeolites supported iron catalysts (56)L1

Activity and thermoresistance of fused iron catalysts for ammonia synthesis (58)29

Iron-based ammonia synthesis catalysts prepared via non-oxidic precursors (59)249

Adsorption of group VIII metal cyanide complexes on acid-modified γ -alumina. Preparation of new supported metallic catalysts (49)255

Influence of water soaking on the structure and properties of fused-iron catalyst for ammonia synthesis (55)33

Effect of pressure on the reduction rate of a fused iron catalyst for ammonia synthesis (54)11

Ammonoxidation

Ammonoxidation of picolines on vanadium phosphate catalysts (49)205

Ammonoxidation of toluene over coke-covered alumina (59)129

Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts — a review (57)149

Aniline

Kinetic model of nitrobenzene hydrogenation to aniline over industrial copper catalyst considering the effects of mass transfer and deactivation (59)31

Anionic vacancies

Semiconductivity study of ceria-supported nickel related to its methanation catalytic activity (53)117

Anisole

Influence of sulphur level on hydrodeoxygenation (52)41

Design of synthetic zeolites as catalysts in organic reactions: Acylation of anisole by acyl chlorides or carboxylic acids over acid zeolites (49)109

Anodic alumina films

Model planar alumina catalyst preparation and aging under hydrotreating conditions (50)65

Antimony

Effect of added Sb_2O_3 , BiPO_4 or SnO_2 on the catalytic properties of ZnFe_2O_4 in the oxidative dehydrogenation of butene to butadiene (51)235

Antimony oxide

Effect of antimony(IV) oxide, bismuth phosphate and tin(IV) oxide on the catalytic properties of compound oxide catalysts in the oxidative dehydrogenation of n-butene (47)113

Oxidative coupling of methane over alkali-doped antimony oxide (53)71

Antimony oxides: A guide to phase changes during catalyst preparation — a review (48)123

Aromatic hydrocarbon conversion

Shape selectivity of zeolite EU-1 in reactions of aromatic hydrocarbons (49)307

Aromatization

Aromatization of isophorone to 3,5-xyleneol (48)223

Aromatization of n-hexane over Pt-KL catalyst (51)L7

Calculated equilibria for the alkenes and alcohol aromatization processes (54)37

Structural recognition and preorganization in zeolite catalysis: Direct aromatization of n-hexane on zeolite L-based catalysts (45)L15

Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane steam-cracker (52)1

Factors affecting the selectivity of the aromatization of light alkanes on modified ZSM-5 catalysts (41)89

Conversion of light alkanes to aromatic hydrocarbons. II. Role of gallium species in propane transformation on GaHZSM5 catalysts (43)155

Conversion of propene into gasoline and middle distillate using alkali ZSM-5 zeolite catalysts (45)L1

Arrhenius behaviour (non-)

An unusual form of non-Arrhenius behaviour in ethyne hydrogenation over palladium catalysts (55)L5

Artificial intelligence

Performance of promoted SnO_2 catalysts designed by an expert systems approach for oxidative dehydrogenation of ethylbenzene (50)L13

Atmospheric residual oil

Effect of catalyst composition on the hydrodesulphurization and hydrodemetallization of atmospheric residual oil (45)221

Automated test bench

Automated testing of methanol synthesis catalysts (43)301

Automotive exhaust catalyst

Analytical electron microscopy of a vehicle-aged automotive catalyst (53)233

Electron microscopy study of a rejuvenated vehicle-aged automotive exhaust catalyst (56)45

Analytical electron microscopy study of two vehicle-aged automotive exhaust catalysts having dissimilar activities (56)23

Evolution during thermal treatment of pure and lanthanum-doped $\text{Pt}/\text{Al}_2\text{O}_3$ and $\text{Pt-Rh}/\text{Al}_2\text{O}_3$ automotive exhaust catalysts: Transmission electron microscopy studies on model samples (50)79

Automotive exhaust gas

Automotive exhaust gas catalysts: Surface structure and activity (48)71

B

Barium

Oxypropylene of natural gas (58)269

Barium/calcium oxide

Oxidative coupling of methane over Ba/CaO catalysts. A comparison with Li/MgO (59)291

Barium/silica

Role of carbon tetrachloride in the conversion of methane on silica-supported alkali metal added alkaline earth oxide catalysts (58)83

Base properties

Base properties of modified γ -alumina (56)253

Bauxite

Reply to "Comments on Claus Reaction: Effect of forced feed composition cycling" (50)307

Bed loading

Pilot plant testing of hydrotreating catalysts: Influence of catalyst condition, bed loading and dilution (43)251

Bentonite

Alkylation of benzene using an aqueous solution of ethanol (53)157

Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane steam-cracker (52)1

Benzene

Coking and regeneration of zeolite catalysts in fixed beds during cumene cracking (58)53

Benzene alkylation

Alkylation of benzene using an aqueous solution of ethanol (53)157

Alkylation of benzene with 2-chloropropane on chlorine-treated alumina (56)73

Benzene hydrogenation

Metallic area of supported iridium catalysts (54)203

Characterization of the standard platinum/silica catalyst EUROPT-1. VI. Catalytic properties (41)313

Coking, ageing and regeneration of zeolites. XI. Coke formation and deactivation of Pt-ultrastable zeolite HY and PtH-mordenite catalysts during hydrogenation of benzene (58)189

Influence of the support on the catalytic properties of nickel/ceria in carbon monoxide and benzene hydrogenation (46)269

Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. I. Adsorption of the reduction modifiers, water and ϵ -caprolactam on ruthenium (58)281

Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. II. Catalytic hydrogenation of benzene to cyclohexene and cyclohexane (58)291

Benzene hydroxylation

Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium-silicate zeolites (57)L1

Benzene oxidation

Complete catalytic oxidation of benzene over supported vanadium oxides modified by palladium (49)125

Benzophenone azine conversion

Ammonia-hydrazine conversion processes. XVI. Conversion of benzophenone azine into hydrazine catalyzed by sulphonic acids in a two-phase system (41)213

Benzyl alcohol

Real and apparent dispersion of carbon supported palladium-cobalt catalysts (53)29

Bimetallic catalysts

Nature of the metallic phase in platinum-germanium/alumina catalysts (44)23

Ruthenium-palladium catalysts: The effect of palladium on the catalytic behaviour of ruthenium (44)1

Photoassisted deposition of rhodium on platinum/titania samples as a method of preparing bimetallic catalysts (57)191

Bioethanol-to-ethylene process

The Bioethanol-to-ethylene (B.E.T.E.) process (48)265

Bismuth

Effect of added Sb_2O_3 , BiPO_4 or SnO_2 on the catalytic properties of ZnFe_2O_4 in the oxidative dehydrogenation of butene to butadiene (51)235

Bismuth oxide-molybdenum oxide-lithium chloride

Selective oxidative coupling of methane to ethylene with molten oxides containing alkali metal chloride (47)303

Bismuth phosphate

Effect of antimony(IV) oxide, bismuth phosphate and tin(IV) oxide on the catalytic properties of compound oxide catalysts in the oxidative dehydrogenation of n-butene (47)113

Brønsted acid

Shape selectivity of zeolite EU-1 in reactions of aromatic hydrocarbons (49)307

Role of Brønsted and Lewis acid sites during cracking reactions of alkanes (47)33

Framework and extra-framework aluminium distribution in $(\text{NH}_4)_2\text{F}_6\text{Si}$ -dealuminated Y zeolites. Relevance to cracking catalysts (50)287

Enhancing effect of hydrogen on the catalytic activity of trisilver dodecatungstophosphate for the isomerization of 1-butene (55)301

Cracking reactions of C_6 paraffins on HZSM-5 (57)105

BTX

Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane steam-cracker (52)1

Bunker-flow reactor

Progress in the catalysis of the upgrading of petroleum residue a review of 25 years of R & D on Shell's residue hydroconversion technology (47)1

Butadiene

Transformation of ethanol into 1,3-butadiene over magnesium oxide/silica catalysts (43)117

Gas-phase acetoxylation of 1,3-butadiene over palladium catalysts. V. X-ray photoelectron spectroscopic study of Pd-Sb-V-CsCl-KOAc catalyst (50)119

Butadiene cyclodimerization

Dehydrocyclodimerization of 1,3-butadiene catalyzed by magnesium oxide and zirconium oxide (47)L7

Butadiene hydrogenation

Hydrogenation of 1,3-butadiene on Pt(111). Comparison with results on Pt(110) and Pt(100) (43)177

Influence of the support towards platinum catalysed 1,3-butadiene hydrogenation (58)241

Butane dehydrogenation

Effect of added Sb_2O_3 , BiPO_4 or SnO_2 on the catalytic properties of ZnFe_2O_4 in the oxidative dehydrogenation of butene to butadiene (51)235

Butane isomerization

Deactivation of H-mordenite and $\text{ZrO}_2/\text{SO}_4^{2-}$ during n-butane isomerization (46)103

Butane oxidation

Regeneration of a P-V-O-Zn butane oxidation catalyst using chlorine containing hydrocarbons (51)13

Nature of the active sites of $(\text{VO})_2\text{P}_2\text{O}_7$ in the selective oxidation of n-butane. Evidence from doping experiments (48)13

Preparation of vanadium-phosphorus oxide catalysts.

I. Dissolution and reduction of vanadium pentoxide and isolation of the precursor (42)91

Effect of water vapor on the activity and selectivity characteristics of a vanadium phosphate catalyst towards butane oxidation (41)225

Butanethiol desulphurization

Catalytic effect on hydrogen sulphide generation from a tar sand (53)81

Butene dehydrogenation

Effect of antimony(IV) oxide, bismuth phosphate and tin(IV) oxide on the catalytic properties of compound oxide catalysts in the oxidative dehydrogenation of n-butene (47)113

Butene isomerization

Enhancing effect of hydrogen on the catalytic activity of trisilver dodecatungstophosphate for the isomerization of 1-butene (55)301

Butene oligomerization

Lumped kinetic model for propene-butene mixtures oligomerization on a supported phosphoric acid catalyst (41)301

Butene oxidation

Selectivities and intermediates in the oxidation of butene on vanadium oxides on titania (49)273

C

Caesium

Zeolites as base catalysts: Condensation of aldehydes with derivatives of malonic esters (59)237

Calcination

Low-temperature plasma calcination of zeolite $\text{NH}_4\text{Na-Y}$ (48)373

Calcium oxide

Hexane-carbon dioxide reaction catalyzed by alkaline earth metal oxides. II. Reaction network (41)199

Calcium oxide/alumina

Preparation and evaluation of catalysts for the production of ethylene via steam cracking. Effect of operating conditions on the performance of $12\text{CaO}/7\text{Al}_2\text{O}_3$ catalyst (54)119

Calorimetry

Determination of the number and acid strength of acid sites in zeolites by ammonia adsorption. Comparison of calorimetry and temperature-programmed desorption of ammonia (42)239

Infrared and calorimetric studies of the adsorption of carbon monoxide on zeolite-supported iridium catalysts (46)227

Caprolactam

Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. I. Adsorption of the reduction modifiers, water and ϵ -caprolactam on ruthenium (58)281

Carbon dioxide

Effects of carbon dioxide and catalyst preparation on the oxidative dimerization of methane (59)213

Carbon dioxide hydrogenation

Hydrogenation of carbon dioxide over copper-zirconia catalysts prepared by in-situ activation of amorphous copper-zirconium alloy (48)279

Supported copper catalysts prepared from copper(II) formate. Hydrogenation of carbon dioxide containing feedstocks (48)365

Hydrogenation of carbon dioxide and carbon monoxide over supported rhodium catalysts under 10 bar pressure (46)1

Carbon dioxide methanation

Carbon dioxide hydrogenation on potassium-promoted nickel catalysts (50)189

Comparative study of the activity of titania and silica-based catalysts for carbon dioxide methanation (41)241

Carbon dioxide poisoning

Novel methanol synthesis catalysts derived from inter-metallic precursors: CO₂ poisoning and molecular mechanism of the synthesis reaction (50)157

Carbon filaments

Novel type of carbon-supported catalysts. I. Preparation and characterization (48)253

Novel type of carbon-supported catalysts. II. Activity measurements (49)319

Carbon gasification

Catalytic gasification of carbon: Method for the determination of the activity of alkali metal catalysts in the gasification of highly pure amorphous and graphitic carbons with steam (50)199

Carbon monoxide

Methanol synthesis on Cu/ZnAl₂O₄ and Cu/ZnO-Al₂O₃ catalysts: Influence of carbon monoxide pretreatment on the formation and concentration of formate species (59)165

Carbon monoxide adsorption

Interaction of carbon monoxide with molybdena-promoted platinum/silica: Fourier transform infrared study at room temperature (52)263

Determination of the accessible metallic surface of supported platinum: Quantitative infrared spectroscopic study of carbon monoxide adsorption (59)153

Infrared and calorimetric studies of the adsorption of carbon monoxide on zeolite-supported iridium catalysts (46)227

Carbon monoxide dissociation

Novel type of carbon-supported catalysts. I. Preparation and characterization (48)253

Carbon monoxide hydrogenation

Hydrocarbon synthesis over palladium/ZSM-5 bifunctional catalysts (41)65

Carbon monoxide hydrogenation over metal loaded aluminophosphates (47)225

Hydrogenation of carbon monoxide over iron catalysts on different supports (50)211

Potassium promotion of Ni/Al₂O₃ catalysts (54)159

New iron/nickel alloy catalyst for Fischer-Tropsch synthesis (57)15

C₂ oxygenate synthesis from CO hydrogenation on AgRh/SiO₂ (57)241

Carbon-supported, (alkali metal) (Fe₂Mn(CO)₁₂)-derived catalysts. Adsorption properties and catalytic behavior in carbon monoxide hydrogenation (51)93

Hydrogenation of carbon dioxide and carbon monoxide over supported rhodium catalysts under 10 bar pressure (46)1

Synthesis of alcohols from carbon oxides and hydrogen. XVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn-

Cr-O systems in the synthesis of alcohols from carbon monoxide and hydrogen (57)253

Effects of the addition of zeolites on ruthenium catalysts in carbon monoxide hydrogenation (49)45

Silica supported rhodium-ruthenium bimetallic catalysts in carbon monoxide hydrogenation. I. Influence of the method of preparation and methanation behaviour (42)229

Influence of the support on the catalytic properties of nickel/ceria in carbon monoxide and benzene hydrogenation (46)269

Effects of chloride precursors on the palladium valency and surface structures of $\text{Pd-Mg}^{2+}/\text{SiO}_2$ catalysts for carbon monoxide hydrogenation (57)55

Preparation of monovalent copper by a single electron transfer step in the photoreduction of zinc oxide-supported copper catalysts (41)147

Relationship between the catalytic properties and surface composition of a polycrystalline Fe-Ni ribbon (58)219

Novel catalyst for liquid phase Fischer-Tropsch synthesis: Potassium-promoted copper-iron ultrafine particles prepared by liquid-phase chemical deposition (47)L1

Calorimetric study of the coadsorption of hydrogen and carbon monoxide over ruthenium graphitized carbon black catalysts (55)21

Promoting effect of lanthana in the hydrogenation of carbon monoxide over supported rhodium catalysts (42)77

Influence of carrier doping on catalytic performance of titanium dioxide supported platinum (46)297

Carbon monoxide oxidation

Novel type of carbon-supported catalysts. II. Activity measurements (49)319

Solid electrolyte potentiometry at an oxide electrode (49)L1

Preparation and characterization of thermostable silver on α -alumina catalysts (44)133

Activity and sulphur tolerance of monophase spinels in carbon monoxide and C_xH_y oxidation (47)141

Modelling catalyst-support interactions in carbon monoxide oxidation catalysed by Pd/SnO_2 (49)55

Hydrothermal stability of silica as a support for platinum in an oxidation catalyst (44)251

Effect of calcination atmosphere on $\text{CuO}/\gamma\text{-Al}_2\text{O}_3$ catalyst for carbon monoxide oxidation (52)157

Structure and activity of chromium-promoted Raney copper catalysts for carbon monoxide oxidation (44)11

Carbon monoxide-hydrogen

Temperature-programmed desorption studies on Pd/CeO_2 after methanol and formic acid adsorption and carbon monoxide-hydrogen reaction (50)43

Carbon oxides conversion

Isotopic exchange measurements of the rate of inter-conversion of carbon monoxide and carbon dioxide over nickel supported on rare earth oxides (58)255

Carbon tetrachloride

Role of carbon tetrachloride in the conversion of methane on silica-supported alkali metal added alkaline earth oxide catalysts (58)83

Regeneration of a P-V-O-Zn butane oxidation catalyst using chlorine containing hydrocarbons (51)13

Carbonaceous residues

About coke deposition on zeolite HY. A ^{129}Xe -NMR study (43)L5

Carbonyl group hydrogenation

New approach to skeletal nickel catalysts. Catalytic properties of the nickel-chromium system (42)285

Carbonylation

The selectivity problem in the homogeneous carbonylation and hydrocarbonylation of alcohols and esters - A review (50)99

Carburization

Effect of high-temperature reduction on carburization of alumina-supported palladium: evidence for palladium-aluminium alloy formation (54)267

Carrier doping

Influence of carrier doping on catalytic performance of titanium dioxide supported platinum (46)297

Catalyst bed dilution

Pilot plant testing of hydrotreating catalysts: Influence of catalyst condition, bed loading and dilution (43)251

Design of laboratory hydrotreating reactors scaling down of trickle-flow reactors (43)273

Catalyst characterization (^{129}Xe NMR) ^{129}Xe NMR investigation of SAPO-37 (54)L1**Catalyst characterization (AAS, electron microprobe analyses)**

Novel hydrotreating catalysts prepared from heteropolyanion complexes impregnated on alumina (48)187

Catalyst characterization (AAS)Selective dehydrogenation of cyclohexanol to cyclohexanone on Cu-ZnO- Al_2O_3 catalysts (45)L11**Catalyst characterization (acidity)**

Catalytic hydrodesulphurization of terpenes (50)87

Chemisorptive and catalytic properties of rhodium mixed oxide (RhNbO_4) catalyst during oxidation-reduction treatments. A high activity for ethane hydrogenolysis (53)L11

Surface acidity, catalytic activity and selectivity of some oxides supported on alumina (41)1

Catalyst characterization (adsorption, DRIFT, DTG, TEM, XPS)

Preparation of silica-supported copper catalysts by means of deposition-precipitation (59)275

Catalyst characterization (adsorption)

Influence of the level of dealumination on the selective adsorption of olefins and paraffins and its implication on hydrogen transfer reactions during catalytic cracking on USY zeolites (47)123

Effect of hydrothermal treatment on alumina as support for noble metal catalysts (59)89

Copper surface area and acidity in CO/H_2 of $\text{Cu}/\text{ZnO}/\text{Al}_2\text{O}_3$ methanol synthesis catalysts (60)73

Slow uptake of oxygen and carbon monoxide by platinum/silica (EUROPT-1) and subsequent effects on hydrogenation of benzene and hydrogenolysis of methylcyclopentane (42)337

Effect of particle size and the reactivity of oxygen-adsorbed platinum supported on alumina (59)141

Catalyst characterization (AEM, EPMA)

Electron microscopy study of a rejuvenated vehicle-aged automotive exhaust catalyst (56)45

Analytical electron microscopy study of two vehicle-aged automotive exhaust catalysts having dissimilar activities (56)23

Catalyst characterization (AEM)

Study by analytical electron microscopy of the potassium distribution on silica-supported nickel and palladium catalysts (47)353

Catalyst characterization (AES, ESR, IR, XPS)

Preparation of monovalent copper by a single electron transfer step in the photoreduction of zinc oxide-supported copper catalysts (41)147

Catalyst characterization (AES, XPS)

Oxidative coupling of methane over calcium manganate and gadolinium manganate perovskites promoted with sodium pyrophosphate (60)119

Catalyst characterization (ammonia desorption)

Conversion of light alkanes to aromatic hydrocarbons. II. Role of gallium species in propane transformation on GaHZSM5 catalysts (43)155

Catalyst characterization (Auger electron spectroscopy)

Hydrogenation of 1,3-butadiene on Pt(111). Comparison with results on Pt(110) and Pt(100) (43)177

Catalyst characterization (BET, SEM, XRD, porosimetry)

Structure and selectivity changes in vanadia-titania catalysts used to promote the reduction of nitric oxide with ammonia (52)225

Catalyst characterization (BET, XRD, IR)

Aluminium phosphate-zirconia catalysts I. Structure, texture, acid-base properties and catalytic activity in cyclohexene isomerization of catalysts obtained with propylene oxide (53)135

Catalyst characterization (BET, XRD)Preparation of supported $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ catalysts by the citrate process (41)137

Thermal stability of alkali metals deposited on oxide supports and their influence on the surface area of the support (42)217

Effect of the composition of vanadium-titanium binary phosphate on catalytic performance in vapor-phase aldol condensation (54)29

Preparation and evaluation of catalysts for the production of ethylene via steam cracking. Effect of operating conditions on the performance of $12\text{CaO}/7\text{Al}_2\text{O}_3$ catalyst (54)119

Catalyst characterization (carbon monoxide adsorption)

Hydrogenation of carbon dioxide and carbon monoxide over supported rhodium catalysts under 10 bar pressure (46)1

Catalyst characterization (catalytic activity)

Enhancing effect of hydrogen on the catalytic activity of trisilver dodecatungstophosphate for the isomerization of 1-butene (55)301

Catalyst characterization (chemical trapping, IR, TPD)

Methanol synthesis on $\text{Cu/ZnAl}_2\text{O}_4$ and $\text{Cu/ZnO-Al}_2\text{O}_3$ catalysts: Influence of carbon monoxide pretreatment on the formation and concentration of formate species (59)165

Catalyst characterization (constraint index)

Synthesis and shape-selective properties of ZSM-22 (48)137

Catalyst characterization (cyclic voltammetry)

Effect of lead on the activity of platinum catalysts (44)261

Catalyst characterization (DRS, temperature-programmed techniques)

Effect of phosphorus on molybdenum-based hydrotreating catalysts. I. Characterization of the oxidic state of $\text{P-Mo/Al}_2\text{O}_3$ systems (48)341

Catalyst characterization (DTA, IR, NMR, TPD, XRD)

Effect of dealumination defects on the properties of zeolite Y (56)83

Catalyst characterization (DTA, TGA)

Base properties of modified γ -alumina (56)253

Catalyst characterization (DTA, TPR, UV-VIS-NIR, XRD)

Characterization of copper/zirconia catalysts prepared by an impregnation method (59)45

Catalyst characterization (DTA-TG, IR, UV-VIS, SEM, XPS, XRD)

Synthesis of alcohols from carbon oxides and hydrogen. XVIII. Preparation chemistry, phase transfor-

mations and catalytic behaviour of unpromoted Mn-Cr-O systems in the synthesis of alcohols from carbon monoxide and hydrogen (57)253

Catalyst characterization (DTA, TG, SEM, XRD)

Thermal stability of $\text{Co-Mo/Al}_2\text{O}_3$ hydrodesulphurization catalyst (52)181

Catalyst characterization (EDX, TEM)

Structure of Raney nickel catalysts modified by chromium hydroxide deposition (56)57

Catalyst characterization (EDX, TG-DTA, TPD, SEM, XRD)

Effect of silicon-to-aluminium ratio and synthesis time on high-pressure olefin oligomerization over ZSM-5 (56)263

Catalyst characterization (EDX, TPR)

Structure and activity in CO/H_2 of $\text{Cu/ZnO/Al}_2\text{O}_3$ methanol synthesis catalysts (60)61

Catalyst characterization (EDX, XRD)

Combustion of soot deposits from diesel engines on mixed oxides of vanadium pentoxide and cupric oxide (60)157

Catalyst characterization (EDX)

Analytical electron microscopy of a vehicle-aged automotive catalyst (53)233

Catalyst characterization (electrochemical polarization, TEM)

Real and apparent dispersion of carbon supported palladiumcobalt catalysts (53)29

Catalyst characterization (electron probe, Hg porosimetry, BET)

Thiophene hydrodesulfurization on fresh, spent, and treated catalysts (51)295

Catalyst characterization (EM, TPR, XPS, XRD)

Characterization of the standard nickel/silica catalyst EuroNi-1. I. Background aims, organization and outline (54)59

Catalyst characterization (EM)

Model hydrodesulfurization catalysts: solid state synthesis and characterization of iron containing molybdenum sulphide (56)281

Catalyst characterization (EPMA, t-plot)

Limitation of n-hexane and 3-methylpentane conversion over zeolite ZSM-5 by intracrystalline diffusion (59)311

Catalyst characterization (EPMA)

Co-impregnation of rhodium into alumina honeycombs with acids and salts (56)107

Distributions of HF co-impregnated rhodium, platinum and palladium in alumina honeycomb supports (55)271

Effects of drying on the preparation of HF co-impregnated rhodium/ Al_2O_3 catalysts (55)287

Catalyst characterization (EPR, IR, TPD)

Nitric oxide chemisorption and temperature-programmed desorption study of cobalt and molybdenum catalysts supported on activated carbon and alumina (42)307

Catalyst characterization (EPR, TPDA, XRD)

Coupled conversion of methanol and C_4 -hydrocarbons (CMHC) on iron-containing ZSM-5 type zeolites (57)203

Catalyst characterization (ESCA)

ESCA study of copper catalysts used for the hydration of acrylonitrile to acrylamide (47)339

Catalyst characterization (ESR, IR)

Ammoxidation of toluene over coke-covered alumina (59)129

Catalyst characterization (ESR, magnetic measurements)

Characterization and deactivation of $\text{NiO}-\text{ThO}_2$ catalysts (48)159

Study of low-percentage alumina-supported nickel-molybdenum catalysts by ESR spectroscopy and magnetic measurements (48)177

Catalyst characterization (ESR, TG-DTA, TPD, XRD)

Oxidative coupling of methane over $\text{Y}_2\text{O}_3-\text{CaO}$ catalysts (59)59

Catalyst characterization (ESR, XPS)

Effects of chloride precursors on the palladium valency and surface structures of $\text{Pd}-\text{Mg}^{2+}/\text{SiO}_2$ catalysts for carbon monoxide hydrogenation (57)55

Catalyst characterization (ESR)

Investigation of the features of zinc oxide-based catalysts for propylene dehydroaromatization (44)179

Catalyst characterization (ESR, temperature-programmed techniques)

Oxidative dehydrogenation of cyclohexene over cobalt-exchanged Y-zeolites (50)55

Catalyst characterization (EXAFS)

X-ray absorption study of vanadium on regenerated catalytic-cracking catalysts (51)255

Catalyst characterization (FMR, TPR, XRD)

The state of metallic phase in alumina-supported platinum-chromium catalysts (55)93

Catalyst characterization (FMR)

Thermal decomposition of metal carbonyls on oxide supports containing surface hydrides: A route to highly dispersed metal catalysts with unusual properties (55)235

Catalyst characterization (frontal chromatography)

Investigation of the dispersion of supported copper catalysts by oxygen adsorption and nitrous oxide decomposition (43)91

Catalyst characterization (FT-IR)

Support and alkali promotion effects on the surface chemistry of nickel/silica catalysts (44)105

Interaction of carbon monoxide with molybdena-promoted platinum/silica: Fourier transform infrared study at room temperature (52)263

Catalyst characterization (FT-IR, TGA)

Adsorption and oxidative adsorption of sulfur dioxide on γ -alumina (55)193

Catalyst characterization (gravimetry, MS, XPS-AES)

Surface and sub-surface oxidation of copper and supported copper catalysts by nitrous oxide (46)161

Catalyst characterization (HETP, SEM, TPD, XRD)

Preparation of silico-alumino-phosphates by the rapid crystallization method and their catalytic performance in the conversion of methanol to light olefins (58)155

Catalyst characterization (hydrogen adsorption)

Ruthenium-palladium catalysts: The effect of palladium on the catalytic behaviour of ruthenium (44)1

Catalyst characterization (hydrogen dispersion)

Effects of alumina dissolution and metal ion buffering on the dispersion of alumina supported nickel and ruthenium catalysts (55)137

Catalyst characterization (hydrogen-oxygen titrations)

Study of supported iridium catalysts by hydrogen-oxygen titrations. Influence of the support (58)175

Catalyst characterization (IR, DRS)

Influence of phosphorus concentration on the type and structure of the compounds formed in the oxide form of phosphorus-nickel-molybdenum/alumina catalysts for hydrodesulphurization (48)295

Catalyst characterization (IR, Mössbauer, XPS)

Iron-based ammonia synthesis catalysts prepared via non-oxidic precursors (59)249

Catalyst characterization (IR, SEM, XPS)

Hydrocarbon synthesis over palladium/ZSM-5 bifunctional catalysts (41)65

Catalyst characterization (IR, TPD, XRD)

Oxidative coupling of methane over Ba/CaO catalysts. A comparison with Li/MgO (59)291

Catalyst characterization (IR, XPS, XRD)

Effect of fluorine on hydrogenation of cyclohexene on sulfided Ni (or Co)-Mo/Al₂O₃ catalysts (57)223

Catalyst characterization (IR, XPS)

Effect of phosphorus on molybdenum-based hydro-treating catalysts. II. Hydrodesulphurization activity and characterization of the sulphided state of P-Mo/Al₂O₃ systems (48)353

Catalyst characterization (IR, XRD, phenol hydroxylation)

Titanium silicalite-2: Synthesis, characterization and catalytic properties (58)L1

Catalyst characterization (IR, XRD)

Extraction of extra-framework aluminium in ultra-stable Y zeolites by (NH₄)₂SiF₆ treatments. I. Physico-chemical characterization (59)267

Supported metal cluster compounds as precursors of Fischer-Tropsch catalysts (47)239

Catalyst characterization (IR)

Characterization of chlorine-treated alumina surfaces (48)25

Ammonia adsorption on vanadia supported on titania-silica catalyst. An infrared spectroscopic investigation (51)81

Zeolites as base catalysts: Condensation of aldehydes with derivatives of malonic esters (59)237

Effect of phosphorus on the surface state of alumina-supported nickel-molybdenum catalysts for hydrodesulphurization (56)163

Determination of the accessible metallic surface of supported platinum: Quantitative infrared spectroscopic study of carbon monoxide adsorption (59)153

Catalyst characterization (IR, XRD)

Higher alcohol synthesis over alkali metal-promoted high-temperature methanol catalysts (47)313

Preparation and properties of small silica-supported iron catalyst particles. Influence of reduction procedure (48)327

Catalyst characterization (magnetic, electrical measurements)

Semiconductivity study of ceria-supported nickel related to its methanation catalytic activity (53)117

Catalyst characterization (MAS NMR, IR)

Low-temperature plasma calcination of zeolite NH₄Na-Y (48)373

Catalyst characterization (MASS-NMR)

The Bioethanol-to-ethylene (B.E.T.E.) process (48)265

Catalyst characterization (MES, SEM)

Influence of water soaking on the structure and properties of fused-iron catalyst for ammonia synthesis (55)33

Catalyst characterization (micro-reactor studies)

Methanol synthesis catalysts derived from ternary rare earth, copper, zirconium and rare earth, copper, titanium intermetallic alloys (58)69

Catalyst characterization (microcalorimetry)

Calorimetric study of the coadsorption of hydrogen and carbon monoxide over ruthenium graphitized carbon black catalysts (55)21

Catalyst characterization (NMR, XRD)

Synthesis and characterization of the very large pore molecular sieve MCM-9 (51)L13

Catalyst characterization (Mössbauer spectrometry)

Iron sulphide containing hydrodesulphurization catalysts. Mössbauer study of the sulphidability of α -iron(III) oxide (42)153

Sulfidation of carbon-supported iron oxide catalysts (51)263

Sulphidation of carbon-supported iron-molybdenum oxide catalysts (54)217

Catalyst characterization (Mössbauer spectrometry, TPD)

Morphology and catalytic activity of FeRe bimetallic catalysts supported on silica. II. Catalytic activity in the carbon monoxide-hydrogen reaction (51)49

Catalyst characterization (MS, TG, TPD, TPR)

Promoting effect of lanthana in the hydrogenation of carbon monoxide over supported rhodium catalysts (42)77

Catalyst characterization (nitrogen adsorption)

Studies of molybdena-alumina catalysts. XV. Effect of fluorine-modified alumina on catalyst properties (49)247

Hydrothermal stability of silica as a support for platinum in an oxidation catalyst (44)251

Effect of support material on the catalytic performance of V_2O_5/P_2O_5 catalysts for the selective oxidation of but-1-ene and furan to maleic anhydride and its consecutive nonselective oxidation. I. Results of catalytic testing (45)1

Fibrillar alumina as a wash-coat on monoliths in the catalytic oxidation of xylene (55)123

Catalyst characterization (NMR)

Methanol conversion on aluminophosphates with zeolite structure (42)1

The very large pore molecular sieve VPI-5: an aluminophosphate-hydrate! (56)L21

Activation of zeolite- Ω . I. Physicochemical characterization of calcined and self-steamed samples (42)105

^{13}C -NMR characterization of organic residues on spent hydroprocessing, hydrocracking and demetallization catalysts (55)81

Effects of acid strength of fluid cracking catalysts on resid cracking operation (50)1

Catalyst characterization (other)

Characterization of the standard platinum/silica catalyst EUROPT-1. VI. Catalytic properties (41)313

Exhaust-catalyst development for methanol-fueled vehicles. III. Formaldehyde oxidation (44)73

Selective oxidation of methane over Vycor glass, quartz glass and various silica, magnesia and alumina surfaces (44)33

Catalyst characterization (performance tests)

Automotive exhaust gas catalysts: Surface structure and activity (48)71

Catalyst characterization (pore structure)

Physical and catalytic properties of smectite clays pillared by alumina in disproportionation of 1,2,4-trimethylbenzene (45)171

Catalyst characterization (potentiometry)

Solid electrolyte potentiometry at an oxide electrode (49)L1

Catalyst characterization (PSRA)

Design of a potassium-promoted Rh/Al_2O_3 catalyst for synthesis of C_2 oxygenates by pulse surface reaction rate analysis (55)225

Catalyst characterization (SEM/EDAX, XPS)

Model planar alumina catalyst preparation and aging under hydrotreating conditions (50)65

Catalyst characterization (SEM, XPS, XRD, porosimetry)

Large pore nickel/silica-alumina catalysts for hydrogenation of synthetic distillates. Effects of composition and structure (41)177

Catalyst characterization (SEM, zeta potential)

Surface changes of alumina induced by phosphoric acid impregnation (56)197

Catalyst characterization (SEM)

Preparation and characterization of thermostable silver on α -alumina catalysts (44)133

Catalyst characterization (spectroscopic techniques, TPR)

Vanadia supported on titania-silica: Physical characterization and activity for the selective reduction on nitric oxide (51)67

Morphology and catalytic activity of iron-rhenium bimetallic catalysts supported on silica. I. Temperature-programmed reduction, X-ray photoelectron spectroscopy and Mössbauer study (51)33

Catalyst characterization (spectroscopic techniques)

Vanadium interactions with treated silica aluminas (45)291

Selective oxidation of *n*-pentane on 12-molybdovanadophosphoric acids (46)197

Framework and extra-framework aluminium distribution in $(\text{NH}_4)_2\text{F}_6\text{Si}$ -dealuminated Y zeolites. Relevance to cracking catalysts (50)287

Coke formation through the reaction of ethene over hydrogen mordenite. II. IR and ^{13}C -NMR studies (45)345

Influence of pH on the preparation of monometallic rhodium and platinum, and bimetallic rhodium-platinum catalysts supported on γ -alumina (46)31

Studies on the promotion of nickel-alumina coprecipitated catalysts. III. Cerium oxide (45)281

Highly selective dimerization of ethylene over Pd-Mg-X zeolite and determination of its active sites by infrared spectroscopy (52)81

Characterization of nickel catalysts by chemisorption techniques, X-ray diffraction and magnetic measurements. Effects of support, precursor and hydrogen pretreatment (46)281

Studies on the promotion of nickel-alumina coprecipitated catalysts. II. Lanthanum oxide (45)257

Influence of the support on the catalytic properties of nickel/ceria in carbon monoxide and benzene hydrogenation (46)269

Ethylene homologation reaction in the presence of metathesis on $\text{MoO}_3/\text{SiO}_2$ catalyst: Selectively promoted by adding copper (50)15

Methanol synthesis on monovalent copper species stabilized on silica and zinc oxide (51)141

Gas-phase acetoxylation of 1,3-butadiene over palladium catalysts. V. X-ray photoelectron spectroscopic study of Pd-Sb-V- CsCl -KOAc catalyst (50)119

Double promotion of palladium/silica catalysts by iron and magnesium oxide in synthesis of methanol from carbon monoxide and hydrogen (45)71

Studies on the promotion of nickel-alumina coprecipitated catalysts. I. Titanium oxide (45)239

Investigation of the effect of water and oxygen on the reaction of propylene with cobalt oxide-magnesium oxide solid solutions. II. IR spectroscopic study (50)37

Selective hydroformylation of ethene and propene catalysed on NaY zeolite-entrapped Rh_6 and bimetallic RhFe clusters and their structural characterization by extended X-ray absorption fine structure and Fourier transform infrared spectroscopy (50)294

Catalyst characterization (STEM, TEM, XPS)

Photoassisted deposition of rhodium on platinum/titania samples as a method of preparing bimetallic catalysts (57)191

Catalyst characterization (surface area, porosity)

Stability of passivated Raney copper catalysts during reduction before use (54)53

Catalyst characterization (surface area)

Control of porosity and surface area in alumina: II. Alcohol and glycol additives (56)187

Control of porosity and surface area in alumina: I. Effect of preparation conditions (56)177

Catalyst characterization (surface science)

In situ study of catalysts. Application in methanol synthesis and ethylene epoxidation (43)311

Catalyst characterization (TEM, adsorption)

Metallic area of supported iridium catalysts (54)203

Catalyst characterization (TEM, spectroscopic techniques)

Characterization of coprecipitated nickel catalysts: Comparison of NiO/SiO₂ and NiO/TiO₂ catalysts (47)155

Catalyst characterization (TEM, STEM, EDX, EELS, Auger)

Unique bimetallic nickel-chromium and nickel-molybdenum catalysts for hydrogenation in the liquid phase (53)217

Catalyst characterization (TEM, temperature-programmed techniques)

Novel type of carbon-supported catalysts. I. Preparation and characterization (48)253

Catalyst characterization (TEM, XPS)

Effect of dispersion of supported palladium on its electronic and catalytic properties in the hydrogenation of vinylacetylene (42)131

Effect of Pd/C dispersion on its catalytic properties in acetylene and vinylacetylene hydrogenation (54)277

Catalyst characterization (TEM, XRD)

Effect of pretreatment on the adsorption properties of silver crystallites (42)255

Catalytic cracking of gasoil: Benefits in activity and selectivity of small Y zeolite crystallites stabilized by a higher silicon-to-aluminium ratio by synthesis (55)65

Catalyst characterization (TEM)

Evolution during thermal treatment of pure and lanthanum-doped Pt/Al₂O₃ and Pt-Rh/Al₂O₃ automotive exhaust catalysts: Transmission electron microscopy studies on model samples (50)79

Sulphide catalysts on silica as a support. VIII. Peculiarities of thiophene hydrogenolysis and probable nature of "synergetic effect" (45)191

Effect of preliminary treatment with ammonia on the reduction of CuY zeolite (45)27

Temperature-programmed reduction of hydrodesulphurization catalysts (46)11

Characterization of hydro-cracking catalysts by acidity measurements (47)45

Effect of nickel on the surface acidity of γ -alumina and alumina-supported nickel-molybdenum hydrotreating catalysts (50)237

Preparation of supported copper catalysts reduction of copper/alumina catalysts (47)L9

Effects of pH during preparation on the physicochemical, acidity and catalytic properties and cooking tendencies of HZSM-5-type catalysts (49)27

Hydrocarbon reforming on Pt-Re-S/Al₂O₃-Cl coked in a commercial reactor (52)249

Temperature-programmed desorption studies on Pd/CeO₂ after methanol and formic acid adsorption and carbon monoxide-hydrogen reaction (50)43

Temperature-programmed decomposition as a probe for the surface reactivity of heterogeneous catalysts. Model system Os₃(CO)₁₂ supported on silica and alumina (46)145

Influence of the support on the catalytic properties of nickel/ceria in carbon monoxide and benzene hydrogenation (46)269

Promoting effects of lithium on Pd/CeO₂ catalysts in carbon monoxide-hydrogen reactions: Chemical trapping and temperature-programmed desorption studies (51)165

Synthesis and characterization of bimetallic clusters prepared by sublimation of Re₂(CO)₁₀ onto Pt/NaY (46)45

Conversion of ethanol to acetone over zinc oxide-calcium oxide catalyst. Optimization of catalyst preparation and reaction conditions and deduction of reaction mechanism (52)237

Characterization of supported copper catalysts for methanol dehydrogenation prepared from silica hydrogel (45)335

Platinum-tin/alumina catalyst: Modification of the metallic phase after successive oxidation-reduction cycles (45)61

Enantioselective hydrogenation of α -keto esters: Temperature-programmed reduction study of liquid-phase Pt/Al₂O₃ hydrogenation catalysts (52)19

Cyclohexane hydrogenation on rhodium catalysts in the gas phase. Kinetics of the reaction and origin, mechanism and kinetics of the deactivation process (46)131

Investigation of the effect of water and oxygen on the reaction of propylene with cobalt oxide-magnesium oxide solid solutions. I. Thermodesorption study (50)27

Catalyst characterization (temperature-programmed techniques, XPS)

Acid-leached dealuminated mordenite: effect of acid concentration on catalyst life in methanol conversion (53)169

Catalyst characterization (temperature-programmed techniques)

Design and study of catalysts for selective hydrogenation (53)63

Hydroxyl groups in phosphorus-modified HZSM-5 (53)299

Conversion of methanol to hydrocarbons over silica-alumina. Selective formation of lower olefins (54)139

Catalyst characterization (TG/DTG, DSC, XRD, nitrogen adsorption)

Zirconia as a support for catalysts. Evolution of the texture and structure on calcination in air (57)127

Catalyst characterization (TGA, XPS)

Segregation and chemical state of vanadium and molybdenum in vanadium-molybdenum oxide catalyst studied by X-ray photoelectron spectroscopy (56)207

Catalyst characterization (TGA, XRD)

Quantitative monitoring of the crystallization of zeolite ZSM-5/silicalite in non-alkaline media (56)19

Catalyst characterization (thermal analysis, XRD, TPR, SQXRF)

Synthesis of higher alcohols over copper/cobalt catalysts. Influence of preparative procedures on the activity and selectivity of Cu/Co/Zn/Al mixed oxide catalyst (53)279

Catalyst characterization (thermorestistance)

Activity and thermoresistance of fused iron catalysts for ammonia synthesis (58)29

Catalyst characterization (TPD, nitric oxide adsorption)

Studies of molybdena-alumina catalysts. XVII. sulfided catalysts exposed to air (58)199

Catalyst characterization (TPD, TPR)

Potassium promotion of Ni/Al₂O₃ catalysts (54)159

Comparative study of the activity of titania and silica-based catalysts for carbon dioxide methanation (41)241

Catalyst characterization (TPD, XRD)

Effect of additives on lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (56)119

Catalyst characterization (TPD)

Determination of framework concentrations of gallium in [Ga]-ZSM-5 (54)177

Adsorption studies of different reagents on supported palladium catalysts (60)1

Transformation of ethanol into 1,3-butadiene over magnesium oxide/silica catalysts (43)117

Lithium chemistry of lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (58)131

Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts (57)31

Catalyst characterization (TPR, hydrogen adsorption)

Influence of the reduction temperature on the characteristics of the metallic phase of Pt-Ge/Al₂O₃ catalysts (60)47

Catalyst characterization (TPR, XPS)

Molybdena-alumina interaction chemistry: Effect of preadsorbed sulphate and fluorine anions on the dispersion of molybdenum (55)215

Structure and reactivity of titania-supported oxides: IV. Characterisation of dried vanadia/titania catalyst precursors (46)89

Nature of the metallic phase in platinum-germanium/alumina catalysts (44)23

Characterization of silica-supported copper catalysts by means of temperature-programmed reduction (60)181

Oxidative redispersion of palladium and formation of PdO particles in NaY. An application of high precision TPR (54)189

Characterization of the standard nickel/silica catalyst EuroNi-1. II. Chemical aspects: precipitation, reduction and chemical analysis (54)65

Characterization and catalytic activity of copper/alumina methanol synthesis catalysts (44)165

Interaction between iridium and platinum precursors in the preparation of iridium platinum catalysts (42)61

Effect of thermal treatment on the reducibility of alumina-supported nickel catalysts (51)223

Catalyst characterization (transient response)

Kinetic study of the low-temperature water-gas shift reaction over a Cu-ZnO catalyst (49)285

Catalyst characterization (UV-VIS, SEM, XRD)

Iron complexes used for the preparation of zeolites supported iron catalysts (56)L1

Catalyst characterization (X-ray spectral microanalysis)

Study of structural and mechanical properties of granulated alumina supports using X-ray microprobes (55)75

Catalyst characterization (XPS, AES, TPD)

Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. I. Adsorption of the reduction modifiers, water and ϵ -caprolactam on ruthenium (58)281

Catalyst characterization (XPS, Auger spectroscopy, ion scattering spectrometry)

Effects of pretreatment on the surface properties of iron Fischer-Tropsch catalysts (48)199

Catalyst characterization (XPS, HREM)

Hydrodesulphurization activity and characterization of sulphided molybdenum and cobalt-molybdenum catalysts. Comparison of alumina-, silica-alumina- and titania-supported catalysts (52)211

Catalyst characterization (XPS, Raman spectroscopy, surface potential)

Silica supported molybdena catalysts. Characterization and methane oxidation (44)117

Catalyst characterization (XPS, XRD)

Influence of phosphorus in vanadium-containing catalysts for NO_x removal (55)151

Synthesis of C_2 -oxygenates from syngas over cobalt catalysts promoted by ruthenium and alkaline earths (48)149

Flue gas desulfurisation: Catalytic removal of sulphur dioxide by carbon monoxide on sulphided $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$. II. Reaction of sulphur dioxide and carbon monoxide in a flow system (41)289

Catalyst characterization (XPS)

Carbon monoxide hydrogenation over metal loaded aluminophosphates (47)225

The role of tin in supported rhodium-tin bimetallic catalysts (47)25

Solid catalyst treated with anion: XVIII. Benzoylation of toluene with benzoyl chloride and benzoic anhydride catalysed by solid superacid of sulfate-supported alumina (59)197

Valency and adsorption characteristics of a sulphided $\text{MoO}_3/\text{-Al}_2\text{O}_3$ methanation catalyst (55)11

Relationship between the catalytic properties and surface composition of a polycrystalline Fe-Ni ribbon (58)219

Catalyst characterization (XRD, AAS, temperature-programmed techniques)

Investigation of Kölbl-Engelhardt synthesis over iron-based catalysts (47)205

Catalyst characterization (XRD, AAS)

Characterization of copper/alumina catalysts prepared by deposition-precipitation using urea hydrolysis. I. Nitrous oxide decomposition and reaction of ethanol (45)103

Catalyst characterization (XRD, catalytic test reaction)

Quality control in the preparation of zeolite ZSM-5 using a catalytic test reaction (55)259

Catalyst characterization (XRD, ESR, DRS)

Complete catalytic oxidation of benzene over supported vanadium oxides modified by palladium (49)125

Catalyst characterization (XRD, IR, TPR)

Oxidative dimerization of methane on lead oxide-alumina catalysts (45)209

Catalyst characterization (XRD, SEM, Auger electron spectroscopy)

Hydrogenation of carbon dioxide over copper-zirconia catalysts prepared by in-situ activation of amorphous copper-zirconium alloy (48)279

Catalyst characterization (XRD, SEM)

Structure and activity of chromium-promoted Raney copper catalysts for carbon monoxide oxidation (44)11

HZSM-5 pelletized and modified with α -Ca₃(PO₄)₂ and HPO₄²⁻ as a catalyst for methanol conversion (49)143

Catalyst characterization (XRD, spectroscopic techniques)

Chemical modification of H-ZSM-5 by adsorption of rhodium and phosphorus complexes (50)131

Catalyst characterization (XRD, TEM, temperature-programmed techniques)

Effect of reduction and oxidation treatments on Pd/ZnO catalysts (48)385

Catalyst characterization (XRD, TEM)

Effect of added Sb₂O₄, BiPO₄ or SnO₂ on the catalytic properties of ZnFe₂O₄ in the oxidative dehydrogenation of butene to butadiene (51)235

Catalyst characterization (XRD, temperature-programmed techniques)

Hydrogenation of carbon monoxide over iron catalysts on different supports (50)211

Catalyst characterization (XRD)

Solid catalyst treated with anion: XIX. Synthesis of the solid superacid catalyst of tin oxide treated with sulfate ion (59)205

Effect of antimony(IV) oxide, bismuth phosphate and tin(IV) oxide on the catalytic properties of compound oxide catalysts in the oxidative dehydrogenation of n-butene (47)113

Regeneration of a P-V-O-Zn butane oxidation catalyst using chlorine containing hydrocarbons (51)13

Characterization of γ -alumina-supported Tungsten sulfide hydroprocessing catalysts. I. Low-temperature oxygen chemisorption (41)165

Effect of high-temperature reduction on carburization of alumina-supported palladium: evidence for palladium-aluminium alloy formation (54)267

Preparation of vanadium-phosphorus oxide catalysts. I. Dissolution and reduction of vanadium pentoxide and isolation of the precursor (42)91

Catalyst preparation

Synthesis and characterization of the very large pore molecular sieve MCM-9 (51)L13

Catalyst preparation ("anchoring")

Preparation and characterization of thermostable silver on α -alumina catalysts (44)133

Catalyst preparation (acid leaching)

Catalytic properties in cyclohexene transformation of modified HY zeolites (60)101

Catalyst preparation (acid modification)

Adsorption of group VIII metal cyanide complexes on acid-modified γ -alumina. Preparation of new supported metallic catalysts (49)255

Catalyst preparation (adsorption)

Carbon monoxide hydrogenation over metal loaded aluminophosphates (47)225

Catalyst preparation (alumina dissolution)

Effects of alumina dissolution and metal ion buffering on the dispersion of alumina supported nickel and ruthenium catalysts (55)137

Catalyst preparation (autoclaving)

Synthesis and shape-selective properties of ZSM-22 (48)137

Catalyst preparation (CAD)

Expert systems approach to computer-aided design of catalysts (48)107

Catalyst preparation (crystallization)

Effect of crystallization time on the physicochemical and catalytic properties of a ZSM-5 type zeolite (42)35

Catalyst preparation (citrate process)

Preparation of supported La_{1-x}Sr_xMnO₃ catalysts by the citrate process (41)137

Catalyst preparation (citric acid method)

Effect of antimony(IV) oxide, bismuth phosphate and tin(IV) oxide on the catalytic properties of compound oxide catalysts in the oxidative dehydrogenation of n-butene (47)113

Effect of added Sb₂O₄, BiPO₄ or SnO₂ on the catalytic properties of ZnFe₂O₄ in the oxidative dehydrogenation of butene to butadiene (51)235

Catalyst preparation (cluster decomposition)

Ammonia synthesis over ruthenium supported catalysts derived from $\text{Ru}_3(\text{CO})_{12}$ (53)L1

Catalyst preparation (co-impregnation)

Co-impregnation of rhodium into alumina honeycombs with acids and salts (56)107

Catalyst preparation (co-precipitation)

Synthesis of 2,6-xenolol by alkylation of phenol with methanol (47)347

Stabilized magnesia: a novel catalyst (support) material (54)79

Oxidative coupling of methane over Y_2O_3 -CaO catalysts (59)59

Synthesis of motor fuels from HY-zeolite supported Fischer-Tropsch iron catalysts (55)47

Production of higher alcohols from synthesis gas over nickel containing catalysts. Effects of adding copper and sodium to coprecipitated NiO-TiO₂ catalysts (42)143

Base properties of modified γ -alumina (56)253

Catalyst preparation (co-reduction)

Unique bimetallic nickel-chromium and nickel-molybdenum catalysts for hydrogenation in the liquid phase (53)217

Catalyst preparation (crystallization)

Titanium silicalite-2: Synthesis, characterization and catalytic properties (58)L1

Preparation of silico-alumino-phosphates by the rapid crystallization method and their catalytic performance in the conversion of methanol to light olefins (58)155

Catalyst preparation (dealumination)

Effect of dealumination defects on the properties of zeolite Y (56)83

Acid-leached dealuminated mordenite: effect of acid concentration on catalyst life in methanol conversion (53)169

Catalyst preparation (deposition-precipitation)

Selective dehydrogenation of cyclohexanol to cyclohexanone on Cu-ZnO-Al₂O₃ catalysts (45)L11

Characterization of copper/alumina catalysts prepared by deposition-precipitation using urea hydrolysis. I. Nitrous oxide decomposition and reaction of ethanol (45)103

Catalyst preparation (deposition)

Novel catalyst for liquid phase Fischer-Tropsch synthesis: Potassium-promoted copper-iron ultrafine particles prepared by liquid-phase chemical deposition (47)L1

Catalyst preparation (dry impregnation)

Effect of support material on the catalytic performance of V₂O₅/P₂O₅ catalysts for the selective oxidation of but-1-ene and furan to maleic anhydride and its consecutive nonselective oxidation. I. Results of catalytic testing (45)1

Catalyst preparation (dry mixing)

Synthesis of C₂-oxygenates from syngas over cobalt catalysts promoted by ruthenium and alkaline earths (48)149

Preparation and evaluation of catalysts for the production of ethylene via steam cracking. Effect of operating conditions on the performance of 12CaO/7Al₂O₃ catalyst (54)119

Catalyst preparation (evaporation)

Catalytic hydrodealkylation of tar acids (45)39

Influence of phosphorus in vanadium-containing catalysts for NO_x removal (55)151

Vanadia supported on titania-silica: Physical characterization and activity for the selective reduction on nitric oxide (51)67

Effect of preparation parameters on the catalytic nature of potassium promoted Cu-Co-Cr higher alcohol catalysts (44)153

Temperature-programmed reduction of NiO-WO₃/Al₂O₃ hydrodesulphurization catalysts (46)11

Oxidative coupling of methane over lithium-doped ultrafine crystalline magnesium oxide (47)295

Effect of the composition of vanadium-titanium binary phosphate on catalytic performance in vapor-phase aldol condensation (54)29

Study by analytical electron microscopy of the potassium distribution on silica-supported nickel and palladium catalysts (47)353

Catalyst preparation (extrusion)

HZSM-5 pelletized and modified with α -Ca₃(PO₄)₂ and HPO₄²⁻ as a catalyst for methanol conversion (49)143

Catalyst preparation (freeze drying)

Oxidative coupling of methane over calcium manganate and gadolinium manganate perovskites promoted with sodium pyrophosphate (60)119

Catalyst preparation (fusion)

Influence of water soaking on the structure and properties of fused-iron catalyst for ammonia synthesis (55)33

Catalyst preparation (gas-phase impregnation)

Selectivities and intermediates in the oxidation of butene on vanadium oxides on titania (49)273

Catalyst preparation (gel)

Performance of promoted SnO₂ catalysts designed by an expert systems approach for oxidative dehydrogenation of ethylbenzene (50)L13

Quantitative monitoring of the crystallization of zeolite ZSM-5/silicalite in non-alkaline media (56)L9

Catalyst preparation (high-temperature chlorination)

Characterization of chlorine-treated alumina surfaces (48)25

Alkylation of benzene with 2-chloropropane on chlorine-treated alumina (56)73

Catalyst preparation (hydrogen treatment)

Coal liquefaction using an intermetallic hydride to distribute hydrogen and catalyze the reaction (44)53

Catalyst preparation (hydrolysis/precipitation)

Zirconia as a support for catalysts. Evolution of the texture and structure on calcination in air (57)127

Catalyst preparation (hydrolyzation)

Catalytic storage of hydrogen: Hydrogenation of toluene over a nickel/silica aerogel catalyst in integral flow conditions (42)121

Catalyst preparation (hydrothermal synthesis)

¹²⁹Xe-NMR investigation of SAPO-37 (54)L1

Selective hydrogenation of α,β -unsaturated aldehydes on cobalt-silica catalysts obtained from cobalt chrysotile (56)9

Catalyst preparation (impregnation, ion exchange)

Effect of hydrothermal treatment on alumina as support for noble metal catalysts (59)89

Catalyst preparation (impregnation)

Lithium chemistry of lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (58)131

Effect of dispersion of supported palladium on its electronic and catalytic properties in the hydrogenation of vinylacetylene (42)131

Catalyst preparation (in situ)

Reduction of acetophenone with palladium catalysts by hydrogen transfer and with molecular hydrogen (43)41

Catalyst preparation (in-situ oxidation)

Methanol synthesis catalysts derived from ternary rare earth, copper, zirconium and rare earth, copper, titanium intermetallic alloys (58)69

Catalyst preparation (incipient wetness, wet impregnation)

Interaction between iridium and platinum precursors in the preparation of iridium platinum catalysts (42)61

Catalyst preparation (incipient wetness)

Effect of pretreatment on the adsorption properties of silver crystallites (42)255

Novel type of carbon-supported catalysts. I. Preparation and characterization (48)253

Sulfidation of carbon-supported iron oxide catalysts (51)263

Sulphidation of carbon-supported iron-molybdenum oxide catalysts (54)217

Adsorption studies of different reagents on supported palladium catalysts (60)1

Nickel-based heterogeneous catalysts for olefin oligomerization. I. Support and anion effects (42)205

Characterization and catalytic activity of copper/alumina methanol synthesis catalysts (44)165

Effect of the preparation on the activity and selectivity of supported nickel catalysts (51)1

Effects of the addition of zeolites on ruthenium catalysts in carbon monoxide hydrogenation (49)45

Characterization of γ -alumina-supported Tungsten sulfide hydroprocessing catalysts. I. Low-temperature oxygen chemisorption (41)165

Reduction of acetophenone with palladium catalysts by hydrogen transfer and with molecular hydrogen (43)41

Catalyst preparation (ion exchange, wet impregnation)

Hydrodenitrogenation using ternary metal catalyst on mixed zeolite- γ -alumina supports (47)331

Catalyst preparation (ion exchange)

Hydrogenation of ethyne over an ion-exchanged copper on silica catalyst (58)209

Framework and extra-framework aluminium distribution in $(\text{NH}_4)_2\text{F}_6\text{Si}$ -dealuminated Y zeolites. Relevance to cracking catalysts (50)287

Pelleted copper ion-exchanged silica catalysts for the hydrolysis of acrylonitrile to acrylamide (55)109

Oxidative redispersion of palladium and formation of PdO particles in NaY. An application of high precision TPR (54)189

Activation of zeolite- Ω . I. Physicochemical characterization of calcined and self-steamed samples (42)105

Preparation of PtHY catalysts. Influence on the catalytic properties of the complexes used as platinum precursors (45)325

Chemical modification of H-ZSM-5 by adsorption of rhodium and phosphorus complexes (50)131

Magic-angle-spinning nuclear magnetic resonance and adsorption studies of dealumination and realumination of zeolite ZSM-5 (56)L15

Conversion of methanol on ultrastable faujasitic catalysts. Selective formation of hexamethylbenzene (42)195

Zeolites as base catalysts: Condensation of aldehydes with derivatives of malonic esters (59)237

Metal-support effects in copper catalysts for the liquid phase hydrolysis of acrylonitrile (60)173

Fibrillar alumina as a wash-coat on monoliths in the catalytic oxidation of xylene (55)123

Catalyst preparation (iron complexes)

Iron complexes used for the preparation of zeolites supported iron catalysts (56)L1

Catalyst preparation (kneading)

Thermal stability of Co-Mo/ Al_2O_3 hydrodesulphurization catalyst (52)181

Conversion of ethanol to acetone over zinc oxide-calcium oxide catalyst. Optimization of catalyst preparation and reaction conditions and deduction of reaction mechanism (52)237

Catalyst preparation (leaching)

Structure and activity of chromium-promoted Raney copper catalysts for carbon monoxide oxidation (44)11

Catalyst preparation (ligand exchange)

Hydrogenolysis and isomerization of alkanes on Ru/ Al_2O_3 catalysts of varying dispersions (59)103

Influence of the precursor and the support on the catalytic properties of ruthenium for alkane hydrogenolysis (60)33

Catalyst preparation (mechanical mixing)

Synergy in hydrodesulfurization and hydrogenation on mechanical mixtures of cobalt sulfide on carbon and MoS_2 on alumina (51)L21

Catalyst preparation (melt spinning)

Hydrogenation of carbon dioxide over copper-zirconia catalysts prepared by in-situ activation of amorphous copper-zirconium alloy (48)279

Catalyst preparation (melts)

Catalytic properties of lithium carbonate melts and related slurries for the oxidative dimerization of methane (56)149

Catalyst preparation (metallic complex adsorption)

Iron-based ammonia synthesis catalysts prepared via non-oxidic precursors (59)249

Catalyst preparation (organic compound, use of)

Reaction of acetic acid with methanol over vanadium-titanium binary phosphate catalysts in the presence of oxygen (59)227

Catalyst preparation (organic salt reduction)

Selective transformation of methanol into light olefins on metallic catalysts (42)299

Catalyst preparation (other)

Conversion of methanol to hydrocarbons over silica-alumina. Selective formation of lower olefins (54)139

Catalyst preparation (photocatalytic deposition)

Photoassisted deposition of rhodium on platinum/titania samples as a method of preparing bimetallic catalysts (57)191

Catalyst preparation (photoreduction)

Preparation of monovalent copper by a single electron transfer step in the photoreduction of zinc oxide-supported copper catalysts (41)147

Catalyst preparation (plasma calcination)

Low-temperature plasma calcination of zeolite $\text{NH}_4\text{Na-Y}$ (48)373

Catalyst preparation (polymer coating)

PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. I. Preparation and characterization (43)1

Catalyst preparation (pore size control)

Control of porosity and surface area in alumina: I. Effect of preparation conditions (56)177

Control of porosity and surface area in alumina: II. Alcohol and glycol additives (56)187

Catalyst preparation (precipitation, reduction)

Characterization of the standard nickel/silica catalyst EuroNi-1. II. Chemical aspects: precipitation, reduction and chemical analysis (54)65

Catalyst preparation (precipitation)

Structure of Raney nickel catalysts modified by chromium hydroxide deposition (56)57

Characterization of the standard nickel/silica catalyst EuroNi-1. I. Background, aims, organization and outline (54)59

Preparation of high-surface-area titanium-vanadium binary pyrophosphate catalysts (48)51

Studies on the promotion of nickel-alumina coprecipitated catalysts. III. Cerium oxide (45)281

Synthesis of alcohols from carbon oxides and hydrogen. XVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn-Cr-O systems in the synthesis of alcohols from carbon monoxide and hydrogen (57)253

Study of copper-zinc oxide catalysts, characterisation of the coprecipitate and mixed oxide (55)165

Preparation of silica-supported copper catalysts by means of deposition-precipitation (59)275

Studies on the promotion of nickel-alumina coprecipitated catalysts. II. Lanthanum oxide (45)257

Preparation of vanadium-phosphorus oxide catalysts. I. Dissolution and reduction of vanadium pentoxide and isolation of the precursor (42)91

Promoting effect of lanthana in the hydrogenation of carbon monoxide over supported rhodium catalysts (42)77

Studies on the promotion of nickel-alumina coprecipitated catalysts. I. Titanium oxide (45)239

Catalyst preparation (promoter addition)

Potassium promotion of $\text{Ni/Al}_2\text{O}_3$ catalyst (54)159

Catalyst preparation (pyrolysis)

Thermal decomposition of metal carbonyls on oxide supports containing surface hydrides: A route to highly dispersed metal catalysts with unusual properties (55)235

Catalyst preparation (quality control)

Quality control in the preparation of zeolite ZSM-5 using a catalytic test reaction (55)259

Catalyst preparation (reduction)

ESCA study of copper catalysts used for the hydration of acrylonitrile to acrylamide (47)339

Preparation of uniformly dispersed nickel/silica catalysts from synthetic nickel-chrysotile (53)15

Effect of pressure on the reduction rate of a fused iron catalyst for ammonia synthesis (54)111

Catalyst preparation (rolling technique)

Design and study of catalysts for selective hydrogenation (53)63

Catalyst preparation (several techniques)

Characterization of silica-supported copper catalysts by means of temperature-programmed reduction (60)181

Catalyst preparation (simultaneous precipitation)

Oxidative coupling of methane over LnLiO_2 compounds ($\text{Ln} = \text{Sm}, \text{Nd}, \text{La}$) (51)L1

Catalyst preparation (solid state synthesis)

Model hydrosulfurization catalysts: solid state synthesis and characterization of iron containing molybdenum sulphide (56)281

Catalyst preparation (solid-state reaction)

Novel type of catalyst for the pure dehydrogenation of methanol to formaldehyde (59)L1

Catalyst preparation (statistical evaluation)

Synthesis of higher alcohols over copper/cobalt catalysts. Influence of preparative procedures on the activity and selectivity of $\text{Cu}/\text{Co}/\text{Zn}/\text{Al}$ mixed oxide catalysts (53)279

Catalyst preparation (sulfate treatment)

Solid catalyst treated with anion: XIX. Synthesis of the solid superacid catalyst of tin oxide treated with sulfate ion (59)205

Catalyst preparation (surface interaction)

Effect of Pd/C dispersion on its catalytic properties in acetylene and vinylacetylene hydrogenation (54)277

Catalyst preparation (thermal decomposition)

Investigation of the features of zinc oxide-based catalysts for propylene dehydroaromatization (44)179

Catalyst preparation (UV irradiation)

Effects of carbon dioxide and catalyst preparation on the oxidative dimerization of methane (59)213

Catalyst preparation (vapour deposition)

Chemical vapour deposition method for fine-control of the pore-opening size of Na-mordenite (44)95

Synthesis and characterization of bimetallic clusters prepared by sublimation of $\text{Re}_2(\text{CO})_{10}$ onto Pt/NaY (46)45

Catalytic gasification of carbon: Method for the determination of the activity of alkali metal catalysts in the gasification of highly pure amorphous and graphitic carbons with steam (50)199

Para-selectivity of dialkylbenzenes over modified HZSM-5 by vapour phase deposition of silica (54)257

Catalyst preparation (wet impregnation, ion exchange)

Hydrothermal stability of silica as a support for platinum in an oxidation catalyst (44)251

Catalyst preparation (wet impregnation)

Hydrocarbon synthesis over palladium/ZSM-5 bifunctional catalysts (41)65

Silica supported molybdena catalysts. Characterization and methane oxidation (44)117

Nature of the metallic phase in platinum-germanium/alumina catalysts (44)23

Hydrodenitrogenation of simple aromatic amines on molybdena catalysts (46)241

Steam reforming of *n*-heptane using a $\text{Rh}/\text{MgAl}_2\text{O}_4$ catalyst (47)75

Hydrogenation of carbon monoxide over iron catalysts on different supports (50)211

New catalyst for hydrocracking of vacuum residue (51)213

Metallic area of supported iridium catalysts (54)203

Oxidative coupling of methane over thallium based silica supported catalysts (54)241

Influence of pH on the preparation of monometallic rhodium and platinum, and bimetallic rhodium-platinum catalysts supported on γ -alumina (46)31

Modelling catalyst-support interactions in carbon monoxide oxidation catalysed by Pd/SnO_2 (49)55

Support and alkali promotion effects on the surface chemistry of nickel/silica catalysts (44)105

Hydrogenation of carbon dioxide and carbon monoxide over supported rhodium catalysts under 10 bar pressure (46)1

Preparation of supported copper catalysts reduction of copper/alumina catalysts (47)L9

The state of metallic phase in alumina-supported platinum-chromium catalysts (55)93

Effects of the support and the addition of a second promoter on potassium chloride-copper(II) chloride catalysts used in the oxychlorination of methane (46)251

Addition of metal cations to magnesium oxide catalyst for the aldol condensation of acetone (48)63

Study of low-percentage alumina-supported nickel-molybdenum catalysts by ESR spectroscopy and magnetic measurements (48)177

Distributions of HF co-impregnated rhodium, platinum and palladium in alumina honeycomb supports (55)271

Effect of catalyst composition on the hydrodesulphurization and hydrodemetallization of atmospheric residual oil (45)221

Silica supported rhodium-ruthenium bimetallic catalysts in carbon monoxide hydrogenation. I. Influence of the method of preparation and methanation behaviour (42)229

Investigation of Kölbel-Engelhardt synthesis over iron-based catalysts (47)205

Novel hydrotreating catalysts prepared from heteropolyanion complexes impregnated on alumina (48)187

Preparation of iron/zeolite catalysts active for toluene disproportionation in the presence of hydrogen sulphide (43)57

Preparation and properties of small silica-supported iron catalyst particles. Influence of reduction procedure (48)327

Oxidative coupling of methane over cobalt-magnesium and manganese-magnesium mixed oxide catalysts (60)13

Characterization of copper/zirconia catalysts prepared by an impregnation method (59)45

Alcohol synthesis from syngas on group VIII metal catalysts promoted by Mo-Na₂O (49)213

Effect of phosphorus on the surface state of alumina-supported nickel-molybdenum catalysts for hydrodesulphurization (56)163

Surface acidity, catalytic activity and selectivity of some oxides supported on alumina (41)1

Effect of additives on lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (56)119

Combustion of soot deposits from diesel engines on mixed oxides of vanadium pentoxide and cupric oxide (60)157

Copper catalysts for the steam reforming of methanol. Analysis of the preparation variables (45)53

Effects of drying on the preparation of HF co-impregnated rhodium/Al₂O₃ catalysts (55)287

Platinum-tin/alumina catalyst: Modification of the metallic phase after successive oxidation-reduction cycles (45)61

Catalyst preparation (zeolite synthesis)

Determination of framework concentrations of gallium in [Ga]-ZSM-5 (54)177

Catalytic cracking of gasoil: Benefits in activity and selectivity of small Y zeolite crystallites stabilized by a higher silicon-to-aluminium ratio by synthesis (55)65

Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts (57)31

Catalyst-support interactions

Modelling catalyst-support interactions in carbon monoxide oxidation catalysed by Pd/SnO₂ (49)55

Catalytic cracking catalysts

X-ray absorption study of vanadium on regenerated catalytic-cracking catalysts (51)255

Ceria

Study of supported iridium catalysts by hydrogen-oxygen titrations. Influence of the support (58)175

Cerium

Influence of cerium on the catalytic properties of ZSM-20 zeolite in the cracking of n-heptane: Comparison with rare earth Y zeolites (49)175

Cerium oxide

Studies on the promotion of nickel-alumina coprecipitated catalysts. III. Cerium oxide (45)281

Cetane index

Oligomerization of ethene over nickel-exchanged zeolite Y into a diesel-range product (42)325

Chemical trapping

Promoting effects of lithium on Pd/CeO₂ catalysts in carbon monoxide-hydrogen reactions: Chemical trapping and temperature-programmed desorption studies (51)165

Higher alcohols synthesis from CO + 2H₂ on cobalt-copper catalyst. Use of probe molecules and chemical trapping in the study of the reaction mechanism (53)197

Chloride

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts II: Influence of various compounds containing phosphorus, oxygen, sulphur and chloride on the catalytic performance of platinum catalyst (49)235

Chlorine

Effect of chlorine and sulphur on the selectivity of supported platinum-rhenium catalysts in reactions of n-hexane (46)213

Role of chlorine in improving selectivity in the oxidative coupling of methane to ethylene (46)69

Chlorine/alumina

Alkylation of benzene with 2-chloropropane on chlorine-treated alumina (56)73

Chlorine-treated alumina

Characterization of chlorine-treated alumina surfaces (48)25

Chlorofluorocarbons

Heterogeneous catalytic reactions of chlorofluorocarbons (59)123

Chromia

Thermal stability of alkali metals deposited on oxide supports and their influence on the surface area of the support (42)217

Radiotracers in fluorine chemistry. XIII. Catalysis by fluorinated surfaces: The interaction of [^{36}Cl]-chlorine labelled hydrogen chloride and 1,1-dichlorotetrafluoroethane with fluorinated chromia catalysts (52)69

Chromium

Kinetic model of nitrobenzene hydrogenation to aniline over industrial copper catalyst considering the effects of mass transfer and deactivation (59)31

Chromium-copper

Structure and activity of chromium-promoted Raney copper catalysts for carbon monoxide oxidation (44)11

Chromium hydroxide

Catalytic hydrogenation on Raney nickel catalyst modified by chromium hydroxide deposition (49)91

Chromium hydroxide deposition

Structure of Raney nickel catalysts modified by chromium hydroxide deposition (56)57

Chromium oxide/aluminium trifluoride

Heterogeneous catalytic reactions of chlorofluorocarbons (59)123

Chromium oxide/charcoal

Heterogeneous catalytic reactions of chlorofluorocarbons (59)123

Chrysotile

Selective hydrogenation of α,β -unsaturated aldehydes on cobalt-silica catalysts obtained from cobalt chrysotile (56)9

Preparation of uniformly dispersed nickel/silica catalysts from synthetic nickel-chrysotile (53)15

Citrate process

Preparation of supported $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ catalysts by the citrate process (41)137

Citronellal cyclization

Cyclization of citronellal to isopulegol by zeolite catalysis (47)363

Claus alumina

Effect of Na^+ on sulphation and related reactions over a commercial Claus alumina catalyst (43)167

Claus Reaction

Comments on "Claus Reaction: Effect of forced feed composition cycling" (50)303

Reply to "Comments on Claus Reaction: Effect of forced feed composition cycling" (50)307

Clinoptilolite

Cyclization of citronellal to isopulegol by zeolite catalysis (47)363

Methanol conversion to hydrocarbons using modified clinoptilolite catalysts: Investigation of catalyst lifetime and reactivation (43)133

Co-precipitation

Characterization of silica-supported copper catalysts by means of temperature-programmed reduction (60)181

Coal liquefaction

Coal liquefaction using an intermetallic hydride to distribute hydrogen and catalyze the reaction (44)53

Mechanism for coking of coal liquefaction catalysts involving basic nitrogen compounds, sodium and catalyst acid sites (44)199

Coal tars

Catalytic hydroprocessing of simulated coal tars. I. Activity of a sulphided Ni-Mo/Al₂O₃ catalyst for the hydroconversion of model compounds (54)91

Catalytic hydroprocessing of simulated coal tars. II. Effect of acid catalysts on the hydroconversion of model compounds on a sulphided Ni-Mo/Al₂O₃ catalyst (54)101

Cobalt

Selective transformation of methanol into light olefins on metallic catalysts (42)299

Oxidative dehydrogenation of cyclohexene over cobalt-exchanged Y-zeolites (50)55

Nitric oxide chemisorption and temperature-programmed desorption study of cobalt and molybdenum catalysts supported on activated carbon and alumina (42)307

The selectivity problem in the homogeneous carbonylation and hydrocarbonylation of alcohols and esters — A review (50)99

Existence of synergy between "CoMoS" and Co₉S₈: New proof of remote control in hydrodesulfurization (50)L7

Cobalt acetate monobromide complex

Liquid-phase oxidation of cyclohexanone to adipic acid catalysed by cobalt and bromide ions in acetic acid (42)247

Cobalt/alumina

Novel type of carbon-supported catalysts. II. Activity measurements (49)319

Adsorption of group VIII metal cyanide complexes on acid-modified γ -alumina. Preparation of new supported metallic catalysts (49)255

Cobalt/carbon

Synergy in hydrodesulfurization and hydrogenation on mechanical mixtures of cobalt sulfide on carbon and MoS₂ on alumina (51)L21

Cobalt/copper

Higher alcohols synthesis from CO + 2H₂ cobalt-copper-catalyst. Use of probe molecules and chemical trapping in the study of the reaction mechanism (53)197

Cobalt manganese oxide

Manganese oxide water-gas shift catalysts. Initial optimization studies (51)127

Cobalt-molybdenum/alumina

Performance of the Minilith — A shaped hydrotreatment catalyst (42)47

Regeneration of spent hydroprocessing catalysts: Metals removal (47)83

Effect of fluorine on hydrogenation of cyclohexene on sulfided Ni (or Co)-Mo/Al₂O₃ catalysts (57)223

Effect of thermal treatment on the sintering and structural changes of cobalt-molybdenum/alumina and nickel-molybdenum/alumina hydrotreating catalysts (41)109

Cobalt molybdenum sulphide/alumina

Upflow versus downflow testing of hydrotreating catalysts (43)237

Cobalt oxide-magnesium oxide

Investigation of the effect of water and oxygen on the reaction of propylene with cobalt oxide-magnesium oxide solid solutions. II. IR spectroscopic study (50)37

Cobalt oxide-magnesium oxide

Investigation of the effect of water and oxygen on the reaction of propylene with cobalt oxide-magnesium oxide solid solutions. I. Thermodesorption study (50)27

Cobalt/silica

Thermal decomposition of metal carbonyls on oxide supports containing surface hydrides: A route to highly dispersed metal catalysts with unusual properties (51)235

Cobalt-alkaline earths

Synthesis of C₂-oxygenates from syngas over cobalt catalysts promoted by ruthenium and alkaline earths (48)149

Cobalt/alumina

Thiophene hydrodesulfurization on fresh, spent, and treated catalysts (51)295

Cobalt-magnesium oxide

Oxidative coupling of methane over cobalt-magnesium and manganese-magnesium mixed oxide catalysts (60)13

Cobalt-manganese oxide-ruthenium

Application of Co-Mn₂O₃-Ru catalyst to the process for producing high-calorie substitute natural gas from coke oven gas (47)193

Cobalt-molybdenum

Catalytic hydrodesulphurization of terpenes (50)87

Progress in the catalysis of the upgrading of petroleum residue: A review of 25 years of R & D on Shell's residue hydroconversion technology (47)1

Hydrodesulphurization activity and characterization of sulphided molybdenum and cobalt-molybdenum catalysts. Comparison of alumina-, silica-alumina- and titania-supported catalysts (52)211

Cobalt-molybdenum/alumina

Side reactions in quinoline hydrodenitrogenation (41)81

Novel type of carbon-supported catalysts. II. Activity measurements (49)319

Influence of sulphur level on hydrodeoxygenation (52)41

Catalytic hydrogenolysis of heteroatom-substituted benzenes (52)57

Thermal stability of Co-Mo/Al₂O₃ hydrodesulphurization catalyst (52)181

¹³C-NMR characterization of organic residues on spent hydroprocessing, hydrocracking and demetallization catalysts (55)81

Effect of catalyst composition on the hydrodesulphurization and hydrodemetallization of atmospheric residual oil (45)221

Influence of the nature of the activating molecules on the catalytic activity of cobalt-molybdenum/alumina catalysts (46)113

Cobalt-molybdenum/alumina-carbon

Novel type of carbon-supported catalysts. I. Preparation and characterization (48)253

Cobalt-molybdenum sulphide/carbon

Non-existence of synergism in the hydrodenitrogenation of pyridine over carbon-supported cobalt-molybdenum sulphide catalysts (45)L23

Cobalt-ruthenium

Synthesis of C₂-oxygenates from syngas over cobalt catalysts promoted by ruthenium and alkaline earths (48)149

Cobalt-silica

Selective hydrogenation of α,β -unsaturated aldehydes on cobalt-silica catalysts obtained from cobalt chrysotile (56)9

Coke/alumina

Amoxidation of toluene over coke-covered alumina (59)129

Coke formation

Effect of sulphur on the coking of rhodium in the steam reforming of 1-methylnaphthalene (53)95

Diffusion, cracking and coking on HZSM-5 of various morphologies (42)15

About coke deposition on zeolite HY. A ¹²⁹Xe-NMR study (43)L5

Vanadium interactions with treated silica aluminas (45)291

Role of zeolite non-framework aluminium in catalytic cracking (45)307

Novel type of carbon-supported catalysts. I. Preparation and characterization (48)253

Novel type of carbon-supported catalysts. II. Activity measurements (49)319

Effect of steam on the coking of platinum catalysts. II. Kinetics (49)75

Coupled conversion of methanol and C₄ hydrocarbons to lower olefins (50)149

New catalyst for hydrocracking of vacuum residue (51)213

Influence of sulphur level on hydrodeoxygenation (52)41

Coking and deactivation of zeolites - a review (54)1

Coke deposits on H-ZSM-5 zeolite (54)289

Base properties of modified γ -alumina (56)253

Coupled conversion of methanol and C₄-hydrocarbons (CMHC) on iron-containing ZSM-5 type zeolites (57)203

Amoxidation of toluene over coke-covered alumina (59)129

Progress in the catalysis of the upgrading of petroleum residue: a review of 25 years of R & D on Shell's residue hydroconversion technology (47)1

Coke formation through the reaction of ethene over hydrogen mordenite. II. IR and ^{13}C -NMR studies (45)345

Activity and selectivity modifications produced by coke deposition on mono- and bimetallic reforming catalysts (53)53

Ruthenium-palladium catalysts: The effect of palladium on the catalytic behaviour of ruthenium (44)1

Low-temperature hydrocarbon conversion over rare-earth-exchanged zeolite X catalyst (42)169

Kinetic model of nitrobenzene hydrogenation to aniline over industrial copper catalyst considering the effects of mass transfer and deactivation (59)31

Effects of pH during preparation on the physico-chemical, acidity and catalytic properties and coking tendencies of HZSM-5-type catalysts (49)27

Semiconductivity study of ceria-supported nickel related to its methanation catalytic activity (53)117

Effect of the temperature regime of methanol conversion to hydrocarbons on coking of zeolite catalysts and their regeneration (43)85

Hydrocarbon reforming on Pt-Re-S/ Al_2O_3 -Cl coked in a commercial reactor (52)249

Mechanism for coking of coal liquefaction catalysts involving basic nitrogen compounds, sodium and catalyst acid sites (44)199

Model planar alumina catalyst preparation and aging under hydrotreating conditions (50)65

Kinetic study of hydrogen transfer of olefins under catalytic cracking conditions (58)35

Influence of cerium on the catalytic properties of ZSM-20 zeolite in the cracking of n-heptane: Comparison with rare earth Y zeolites (49)175

Coking and regeneration of zeolite catalysts in fixed beds during cumene cracking (58)53

Coking, ageing and regeneration of zeolites. XI. Coke formation and deactivation of Pt-ultrastable zeolite HY and PtH-mordenite catalysts during hydrogenation of benzene (58)189

Deactivation of iron oxide-iron phosphate catalyst in isopropanol dehydration (55)181

Chemical and structural changes of Na_2MoO_4 as a methanol dehydrogenation catalyst (57)83

Crystallinity of coke on platinum-rhenium/alumina reforming catalyst during the commercial cycle (51)195

^{13}C -NMR characterization of organic residues on spent hydroprocessing, hydrocracking and demetallization catalysts (55)81

Influence of the support towards platinum catalysed 1,3-butadiene hydrogenation (58)241

Effect of catalyst composition on the hydrodesulphurization and hydrometallization of atmospheric residual oil (45)221

Hexane-carbon dioxide reaction catalyzed by alkaline earth metal oxides. II. Reaction network (41)199

Deactivation resistance of ZSM-5 type zeolites containing alkaline earth metals used for methanol conversion (41)121

HZSM-5 pelletized and modified with $\alpha\text{-Ca}_3(\text{PO}_4)_2$ and HPO_4^{2-} as a catalyst for methanol conversion (49)143

Deactivation of H-mordenite and $\text{ZrO}_2/\text{SO}_2^{4-}$ during n-butane isomerization (46)103

Catalytic hydroprocessing of simulated coal tars. I. Activity of a sulphided Ni-Mo/ Al_2O_3 catalyst for the hydroconversion of model compounds (54)91

Effect of phosphorus on the surface state of alumina-supported nickel-molybdenum catalysts for hydrodesulphurization (56)163

Catalytic hydroprocessing of simulated coal tars. II. Effect of acid catalysts on the hydroconversion of model compounds on a sulphided Ni-Mo/ Al_2O_3 catalyst (54)101

Burning of coke on Pt-Re/ Al_2O_3 catalyst: Activation energy and oxygen reaction order (55)1

Effect of high-temperature reduction on carburization of alumina-supported palladium: evidence for palladium-aluminium alloy formation (54)267

Contrast between H-ZSM-5 and H-F-silicates of the pentasil pore structure in propylene conversion (51)155

Selective regeneration of catalytic functions of Pt-Re-S/ Al_2O_3 -Cl during coke burning (56)1

Deactivation of silica-alumina catalyst during the cumene cracking reaction (52)115

Isomerization of *o*-dichlorobenzene over H-mordenite. Effect of the silicon-to-aluminium ratio (51)285

Effect of steam on the coking of platinum catalysts. I. Inhibiting effect of steam at low partial pressure for the dehydrogenation of cyclopentane and the coking reaction (49)67

Effect of acidity of HZSM-5 type zeolite on conversion of alkenes and alkanes to gasoline and aromatics (59)75

Catalytic cracking of gasoil: Benefits in activity and selectivity of small Y zeolite crystallites stabilized by a higher silicon-to-aluminium ratio by synthesis (55)65

Coke oven gas

Application of Co-Mn₂O₃-Ru catalyst to the process for producing high-calorie substitute natural gas from coke oven gas (47)193

Combustion

Catalytic combustion of soot deposits from diesel engines (60)143

Combustion of soot deposits from diesel engines on mixed oxides of vanadium pentoxide and cupric oxide (60)157

Selective regeneration of catalytic functions of Pt-Re-S/Al₂O₃-Cl during coke burning (56)1

Combustion catalysts

Preparation of supported La_{1-x}Sr_xMnO₃ catalysts by the citrate process (41)137

Complex oxides

High selectivity catalysts for the oxidative coupling of methane. Complex oxides with the rock salt structure (42)L1

Computer-aided design

Expert systems approach to computer-aided design of catalysts (48)107

Confinement effects

Comments on "diffusion of alkanes in molecular sieves: Evidence for confinement effects" (52)165

Reply to "comments on diffusion of alkanes in molecular sieves: Evidence for confinement effects" (52)169

Copper

Design and study of catalysts for selective hydrogenation (53)63

Stability of passivated Raney copper catalysts during reduction before use (54)53

Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects (57)215

ESCA study of copper catalysts used for the hydration of acrylonitrile to acrylamide (47)339

Ethylene homologation reaction in the presence of metathesis on MoO₃/SiO₂ catalyst: Selectively promoted by adding copper (50)15

Copper catalysts for the steam reforming of methanol. Analysis of the preparation variables (45)53

Methanol synthesis catalysts derived from ternary rare earth, copper, zirconium and rare earth, copper, titanium intermetallic alloys (58)69

Copper/alumina

Supported copper catalysts prepared from copper(II) formate. Hydrogenation of carbon dioxide containing feedstocks (48)365

Characterization and catalytic activity of copper/alumina methanol synthesis catalysts (44)165

Preparation of supported copper catalysts: Reduction of copper/alumina catalysts (47)L9

Characterization of copper/alumina catalysts prepared by deposition-precipitation using urea hydrolysis. I. Nitrous oxide decomposition and reaction of ethanol (45)103

Metal-support effects in copper catalysts for the liquid phase hydrolysis of acrylonitrile (60)173

Synthesis of cyclic amines and their alkyl derivatives from amine alcohols over supported copper catalysts (53)107

Copper/magnesia

Supported copper catalysts prepared from copper(II) formate. Hydrogenation of carbon dioxide containing feedstocks (48)365

Copper manganese oxide

Manganese oxide water-gas shift catalysts. Initial optimization studies (51)127

Copper oxide

Solid electrolyte potentiometry at an oxide electrode (49)L1

Use of catalytic detector in temperature-programmed reduction (58)147

Copper oxide/alumina

Effect of calcination atmosphere on CuO/ γ -Al₂O₃ catalyst for carbon monoxide oxidation (52)157

Effect of sodium oxide-doping on surface and catalytic properties of CuO/Al₂O₃ solids (52)33

Copper oxide-zinc oxide/alumina

Methanol synthesis from hydrogen, carbon monoxide, and carbon dioxide over a CuO/ZnO/Al₂O₃ catalyst. I. Steady-state kinetics experiments (50)247

Methanol synthesis from hydrogen, carbon monoxide and carbon dioxide over a CuO/ZnO/Al₂O₃ catalyst. II. Development of a phenomenological rate expression (50)265

Copper/REO

Novel methanol synthesis catalysts derived from inter-metallic precursors: CO₂ poisoning and molecular mechanism of the synthesis reaction (50)157

Copper/silica

Hydrogenation of ethyne over an ion-exchanged copper on silica catalyst (58)209

Characterization of silica-supported copper catalysts by means of temperature-programmed reduction (60)181

Pelleted copper ion-exchanged silica catalysts for the hydrolysis of acrylonitrile to acrylamide (55)109

Support and morphological effects in the synthesis of methanol over Cu/ZnO, Cu/ZrO₂ and Cu/SiO₂ catalysts (43)141

Preparation of silica-supported copper catalysts by means of deposition-precipitation (59)275

Surface and sub-surface oxidation of copper and supported copper catalysts by nitrous oxide (46)161

Metal-support effects in copper catalysts for the liquid phase hydrolysis of acrylonitrile (60)173

Methanol synthesis on monovalent copper species stabilized on silica and zinc oxide (51)141

Characterization of supported copper catalysts for methanol dehydrogenation prepared from silica hydrogel (45)335

Copper/titania

Metal-support effects in copper catalysts for the liquid phase hydrolysis of acrylonitrile (60)173

Copper/zeolite

Ethanol conversion over ion-exchanged ZSM-5 zeolites (59)13

Copper/zinc oxide

Investigation of the dispersion of supported copper catalysts by oxygen adsorption and nitrous oxide decomposition (43)91

Support and morphological effects in the synthesis of methanol over Cu/ZnO, Cu/ZrO₂ and Cu/SiO₂ catalysts (43)91

Study of copper-zinc oxide catalysts, characterisation of the coprecipitate and mixed oxide (55)165

Copper/zinc oxide-alumina

Methanol synthesis on Cu/ZnAl₂O₄ and Cu/ZnO-Al₂O₃ catalysts: Influence of carbon monoxide pretreatment on the formation and concentration of formate species (59)165

Copper/zinc oxide/alumina

Copper surface area and acidity in CO/H₂ of Cu/ZnO/Al₂O₃ methanol synthesis catalysts (60)73

Structure and activity in CO/H₂ of Cu/ZnO/Al₂O₃ methanol synthesis catalysts (60)61

Copper/zinc-alumina

Methanol synthesis on Cu/ZnAl₂O₄ and Cu/ZnO-Al₂O₃ catalysts: Influence of carbon monoxide pretreatment on the formation and concentration of formate species (59)165

Copper/zirconia

Supported copper catalysts prepared from copper(II) formate. Hydrogenation of carbon dioxide containing feedstocks (48)365

Characterization of copper/zirconia catalysts prepared by an impregnation method (59)45

Copper/zirconium oxide

Investigation of the dispersion of supported copper catalysts by oxygen adsorption and nitrous oxide decomposition (43)91

Support and morphological effects in the synthesis of methanol over Cu/ZnO, Cu/ZrO₂ and Cu/SiO₂ catalysts (43)141

Copper(I)/zinc oxide

Preparation of monovalent copper by a single electron transfer step in the photoreduction of zinc oxide-supported copper catalysts (41)147

Copper(II) oxide-zinc(II) oxide

Activity and stability of a copper(II) oxide-zinc(II) oxide catalyst for oxidative dehydrogenation of cyclohexanol to cyclohexanone (41)53

Copper-cobalt mixed oxides

Synthesis of higher alcohols over copper/cobalt catalysts. Influence of preparative procedures on the activity and selectivity of Cu/Co/Zn/Al oxide catalysts (53)279

Copper-chromite

Selective hydrogenation of neat isoquinoline. I. Activities of some commercial catalysts and effects of coexisting sulphur-containing compounds in the substrate (41)99

Copper-cobalt-chromium

Effect of preparation parameters on the catalytic nature of potassium promoted Cu-Co-Cr higher alcohol catalysts (44)153

Copper-nickel-barium stearate

Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine (52)171

Copper-zinc oxide/alumina

Effect of carbon dioxide on methanol synthesis over different catalysts (49)83

Selective dehydrogenation of cyclohexanol to cyclohexanone on Cu-ZnO-Al₂O₃ catalysts (45)L11

Kinetic study of the low-temperature water-gas shift reaction over a Cu-ZnO catalyst (49)285

Support and additive effects in the synthesis of methanol over copper catalysts (45)131

Copper-zinc/silica

Methanol synthesis on monovalent copper species stabilized on silica and zinc oxide (51)141

Copper-zirconia

Hydrogenation of carbon dioxide over copper-zirconia catalysts prepared by in-situ activation of amorphous copper-zirconium alloy (48)279

Cracking

Diffusion, cracking and coking on HZSM-5 of various morphologies (42)15

Influence of the pretreatment of cracking catalysts activity and selectivity (47)131

Cracking of C₉ paraffins over xylene isomerization catalysts (57)179

Influence of the level of dealumination on the selective adsorption of olefins and paraffins and its implication on hydrogen transfer reactions during catalytic cracking on USY zeolites (47)123

Low-temperature hydrocarbon conversion over rare-earth-exchanged zeolite X catalyst (42)169

Kinetic study of hydrogen transfer of olefins under catalytic cracking conditions (58)35

Shape selectivity in Y-zeolites. Catalytic cracking of decalin-isomers in fixed bed micro reactors (58)105

Limitation of n-hexane and 3-methylpentane conversion over zeolite ZSM-5 by intracrystalline diffusion (59)311

Methanol conversion to hydrocarbons. Primary versus secondary formation of methane and ethene (42)29

Effect of acidity of HZSM-5 type zeolite on conversion of alkenes and alkanes to gasoline and aromatics (59)75

Catalytic cracking of gasoil: Benefits in activity and selectivity of small Y zeolite crystallites stabilized by a higher silicon-to-aluminium ratio by synthesis (55)65

Cracking catalysts

Vanadium interactions with treated silica aluminas (45)291

Role of zeolite non-framework aluminium in catalytic cracking (45)307

Framework and extra-framework aluminium distribution in (NH₄)₂F₆Si-dealuminated Y zeolites. Relevance to cracking catalysts (50)287

Effects of acid strength of fluid cracking catalysts on resid cracking operation (50)1

Crystallinity

Crystallinity of coke on platinum-rhenium/alumina reforming catalyst during the commercial cycle (51)195

Crystallite size

Support and crystallite size effects in ethylene oxidation catalysis (50)171

Preparation of uniformly dispersed nickel/silica catalysts from synthetic nickel/chrysotile (53)15

Crystallization

Effect of sodium oxide-doping on surface and catalytic properties of $\text{CuO}/\text{Al}_2\text{O}_3$ solids (52)33

Quantitative monitoring of the crystallization of zeolite ZSM-5/silicalite in non-alkaline media (56)L9

Crystallization time

Effect of crystallization time on the physicochemical and catalytic properties of a ZSM-5 type zeolite (42)35

Cumene cracking

Effect of dealumination defects on the properties of zeolite Y (56)83

Coking and regeneration of zeolite catalysts in fixed beds during cumene cracking (58)53

Deactivation of silica-alumina catalyst during the cumene cracking reaction (52)115

Cupric oxide

Combustion of soot deposits from diesel engines on mixed oxides of vanadium pentoxide and cupric oxide (60)157

CuY zeolite

Effect of preliminary treatment with ammonia on the reduction of CuY zeolite (45)27

Cyclic amine synthesis

Synthesis of cyclic amines and their alkyl derivatives from amine alcohols over supported copper catalysts (53)107

Cyclohexane dehydrogenation

Characterization of the standard platinum/silica catalyst EUROPT-1. VI. Catalytic properties (41)313

Supported iridium catalysts. Comparison between resistance to sulphur poisoning and hydrodesulphurization properties (57)99

Platinum-tin/alumina catalyst: Modification of the metallic phase after successive oxidation-reduction cycles (45)61

Cyclohexane hydrogenation

Effect of fluorine on hydrogenation of cyclohexene on sulfided Ni (or Co)-Mo/ Al_2O_3 catalysts (57)223

Cyclohexane hydrogenation on rhodium catalysts in the gas phase. Kinetics of the reaction and origin, mechanism and kinetics of the deactivation process (46)131

Cyclohexane isomerization

Cracking reactions of C_6 paraffins on HZSM-5 (57)105

Cyclohexanol dehydrogenation

Selective dehydrogenation of cyclohexanol to cyclohexanone on Cu-ZnO- Al_2O_3 catalysts (45)L11

Activity and stability of a copper(II) oxide-zinc(II) oxide catalyst for oxidative dehydrogenation of cyclohexanol to cyclohexanone (41)53

Cyclohexanone

Selective dehydrogenation of cyclohexanol to cyclohexanone on Cu-ZnO- Al_2O_3 catalysts (45)L11

Cyclohexanone oxidation

Liquid-phase oxidation of cyclohexanone to adipic acid catalysed by cobalt and bromide ions in acetic acid (42)247

Cyclohexene

Catalytic properties in cyclohexene transformation of modified HY zeolites (60)101

Kinetic study of hydrogen transfer of olefins under catalytic cracking conditions (58)35

Coking, ageing and regeneration of zeolites. XI. Coke formation and deactivation of Pt-ultrastable zeolite HY and PtH-mordenite catalysts during hydrogenation of benzene (58)189

Cyclohexene dehydrogenation

Oxidative dehydrogenation of cyclohexene over cobalt-exchanged Y-zeolites (50)55

Cyclohexene isomerization

Aluminium phosphate-zirconia catalysts I. Structure, texture, acid-base properties and catalytic activity in cyclohexene isomerization of catalysts obtained with propylene oxide (53)135

Cyclopentadiene formation

Effect of steam on the coking of platinum catalysts. I. Inhibiting effect of steam at low partial pressure for the dehydrogenation of cyclopentane and the coking reaction (49)67

Cyclopentane dehydrogenation

Effect of steam on the coking of platinum catalysts. I. Inhibiting effect of steam at low partial pressure for the dehydrogenation of cyclopentane and the coking reaction (49)67

Cyclopentane hydrogenolysis

Platinum-tin/alumina catalyst: Modification of the metallic phase after successive oxidation-reduction cycles (45)61

Cyclopentene

Kinetic study of hydrogen transfer of olefins under catalytic cracking conditions (58)35

D**Deactivation**

Automated testing of methanol synthesis catalysts (43)301

Coke desposits on H-ZSM-5 zeolite (54)289

Hydrocarbon reforming on Pt-Re-S/Al₂O₃-Cl coked in a commercial reactor (52)249

Mechanism for coking of coal liquefaction catalysts involving basic nitrogen compounds, sodium and catalyst acid sites (44)199

Deactivation resistance of ZSM-5 type zeolites containing alkaline earth metals used for methanol conversion (41)121

Deactivation of H-mordenite and ZrO₂/SO₂⁴⁻ during n-butane isomerization (46)103

Activity and stability of a copper(II) oxide-zinc(II) oxide catalyst for oxidative dehydrogenation of cyclohexanol to cyclohexanone (41)53

Deactivation of silica-alumina catalyst during the cumene cracking reaction (52)115

Cyclohexane hydrogenation on rhodium catalysts in the gas phase. Kinetics of the reaction and origin, mechanism and kinetics of the deactivation process (46)131

Dead zone

Effectiveness of reaction proceeding with degree kinetics in a plate catalyst grain (46)189

Dealumination

Effect of dealumination defects on the properties of zeolite Y (56)83

Magic-angle-spinning nuclear magnetic resonance and adsorption studies of dealumination and realumination of zeolite ZSM-5 (56)L15

Dehydrogenation

Catalysis with permselective inorganic membranes - a review (49)1

Activity and selectivity modifications produced by coke deposition on mono- and bimetallic reforming catalysts (53)53

Chemical and structural changes of Na₂MoO₄ as a methanol dehydrogenation catalyst (57)83

Activity and stability of a copper(II) oxide-zinc(II) oxide catalyst for oxidative dehydrogenation of cyclohexanol to cyclohexanone (41)53

Demetallization

Progress in the catalysis of the upgrading of petroleum residue a review of 25 years of R & D on Shell's residue hydroconversion technology (47)1

¹³C-NMR characterization of organic residues on spent hydroprocessing, hydrocracking and demetallization catalysts (55)81

Deposition-precipitation

Preparation of silica-supported copper catalysts by means of deposition-precipitation (59)275

Desulphurization

Catalytic effect on hydrogen sulphide generation from a tar sand (53)81

Progress in the catalysis of the upgrading of petroleum residue a review of 25 years of R & D on Shell's residue hydroconversion technology (47)1

Detector

Use of catalytic detector in temperature-programmed reduction (58)147

Deuterium

PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. I. Preparation and characterization (43)1

Relationship between the catalytic properties and surface composition of a polycrystalline Fe-Ni ribbon (58)219

Dichlorobenzene isomerization

Isomerization of o-dichlorobenzene over H-mordenite. Effect of the silicon-to-aluminium ratio (51)285

Diels-Alder reaction

Dehydrocyclodimerization of 1,3-butadiene catalyzed by magnesium oxide and zirconium oxide (47)L7

Diesel soot

Catalytic combustion of soot deposits from diesel engines (60)143

Combustion of soot deposits from diesel engines on mixed oxides of vanadium pentoxide and cupric oxide (60)157

Diffusion

Diffusion, cracking and coking on HZSM-5 of various morphologies (42)15

Comments on "diffusion of alkanes in molecular sieves: Evidence for confinement effects" (52)165

Reply to "comments on diffusion of alkanes in molecular sieves: Evidence for confinement effects" (52)169

Dimerization

Highly selective dimerization of ethylene over Pd-Mg-X zeolite and determination of its active sites by infrared spectroscopy (52)81

Dimethoxyethane synthesis

Oxidative dimerization of dimethyl ether with solid catalysts (53)L5

Dimethyl ether conversion

Methanol and dimethyl ether conversion to hydrocarbons using tungsten trioxide/alumina as catalyst. A study of catalyst reactivation (41)253

Dimethylamine

Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine (52)171

Dimethyldodecylamine

Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine (52)171

Diphenylmethane

Zeolites in organic reactions. Condensation of formaldehyde with benzene in the presence of HY zeolites (51)113

Dispersion

Investigation of the dispersion of supported copper catalysts by oxygen adsorption and nitrous oxide decomposition (43)91

Hydrogenolysis and isomerization of alkanes on Ru/Al₂O₃ catalysts of varying dispersions (59)103

Characterization of copper/zirconia catalysts prepared by an impregnation method (59)45

Disproportionation

Para-selectivity of dialkylbenzenes over modified HZSM-5 by vapour phase deposition of silica (54)257

Isomerization and disproportionation of *m*-xylene. Selectivities induced by the void structure of the zeolite framework (45)85

Dodecyl alcohol

Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine (52)171

Doping

Nature of the active sites of (VO)₂P₂O₇ in the selective oxidation of *n*-butane. Evidence from doping experiments (48)13

Double bond isomerization

Stabilized magnesia: a novel catalyst (support) material (54)79

Downflow

Upflow versus downflow testing of hydrotreating catalysts (43)237

Drying effects

Effects of drying on the preparation of HF co-impregnated rhodium/Al₂O₃ catalysts (55)287

E**Effectiveness factor**

Effectiveness of reaction proceeding with degree kinetics in a plate catalyst grain (46)189

Electron transfer

Preparation of monovalent copper by a single electron transfer step in the photoreduction of zinc oxide-supported copper catalysts (41)147

Enantioselectivity

Enantioselective hydrogenation of α -keto esters: Temperature-programmed reduction study of liquid-phase Pt/Al₂O₃ hydrogenation catalysts (52)19

Enzyme catalysis

Structural recognition and preorganization in zeolite catalysis: Direct aromatization of n-hexane on zeolite L-based catalysts (45)15

Equilibrium adsorption method

Hydrosulfurization activity of WO₃/ γ -alumina prepared by the equilibrium adsorption method (59)185

Equilibrium calculations

Calculated equilibria for the alkene and alcohol aromatization processes (54)37

Esters

The selectivity problem in the homogeneous carbonylation and hydrocarbonylation of alcohols and esters — A review (50)99

Ethane conversion

Oxidative conversion of methane and C₂ hydrocarbons on oxides: Homogeneous versus heterogeneous processes (47)283

Ethane hydrogenolysis

The state of metallic phase in alumina-supported platinum-chromium catalysts (55)93

Ethane synthesis

Kinetics and mechanism of oxidative coupling of methane over lanthanum-boron oxide (47)273

Ethanol conversion

Acidic properties of ZSM-5 zeolite and conversion of ethanol to diethyl ether (41)13

Ethanol conversion over ion-exchanged ZSM-5 zeolites (59)13

Ethanol conversion

Characterization of copper/alumina catalysts prepared by deposition-precipitation using urea hydrolysis. I. Nitrous oxide decomposition and reaction of ethanol (45)103

Conversion of ethanol to acetone over zinc oxide-calcium oxide catalyst. Optimization of catalyst preparation and reaction conditions and deduction of reaction mechanism (52)237

Conversion of ethanol in aqueous solution over ZSM-5 zeolites. Study of the reaction network (58)119

Ethene

Ethanol conversion over ion-exchanged ZSM-5 zeolites (59)13

Conversion of ethanol in aqueous solution over ZSM-5 zeolites. Study of the reaction network (58)119

Ethene conversion

Oxidative conversion of methane and C₂ hydrocarbons on oxides: Homogeneous versus heterogeneous processes (47)283

Ethene epoxidation

In situ study of catalysts. Application in methanol synthesis and ethylene epoxidation (43)311

Ethene homologation

Ethylene homologation reaction in the presence of metathesis on MoO_x/SiO₂ catalyst: Selectively promoted by adding copper (50)15

Ethene hydrogenation

Nitric oxide chemisorption and temperature-programmed desorption study of cobalt and molybdenum catalysts supported on activated carbon and alumina (42)307

Ethene oligomerization

Oligomerization of ethene over nickel-exchanged zeolite Y into a diesel-range product (42)325

Ethene oxidation

Support participation in chemistry of ethylene oxidation on silver catalyst (44)223

Support and crystallite size effects in ethylene oxidation catalysis (50)171

Comparative study of nitrous oxide and oxygen as oxidants for the conversion of ethylene to ethylene oxide over silver (48)37

Ethene synthesis

Preparation and evaluation of catalysts for the production of ethylene via steam cracking. Effect of operating conditions on the performance of 12CaO/7Al₂O₃ catalyst (54)119

Role of chlorine in improving selectivity in the oxidative coupling of methane to ethylene (46)69

Ethoxychloride

Inorganic salt catalysis in the process for the conversion of alcohols/alkylphenols into ethoxychloride surfactant intermediates (46)313

Ethylbenzene dehydrogenation

Expert systems approach to computer-aided design of catalysts (48)107

Performance of promoted SnO_2 catalysts designed by an expert systems approach for oxidative dehydrogenation of ethylbenzene (50)L13

Activity decay of potassium-promoted iron oxide catalyst for dehydrogenation of ethylbenzene (51)203

Ethylene oxide oxidation

Ethylene oxide oxidation over a supported silver catalyst. II: Kinetics of inhibited oxidation (41)39

Ethylene oxide oxidation over a supported silver catalyst. I. Kinetics of uninhibited oxidation (41)23

Ethylenic group hydrogenation

New approach to skeletal nickel catalysts. Catalytic properties of the nickel-chromium system (42)285

Ethyne hydrogenation

Hydrogenation of ethyne over an ion-exchanged copper on silica catalyst (58)209

Activity and selectivity of $\text{Pd}/\alpha\text{-Al}_2\text{O}_3$ for ethyne hydrogenation in a large excess of ethene and hydrogen (58)227

An unusual form of non-Arrhenius behaviour in ethyne hydrogenation over palladium catalysts (55)L5

EuroNi-1

Characterization of the standard nickel/silica catalyst EuroNi-1. II. Chemical aspects: precipitation, reduction and chemical analysis (54)65

EuroPt-1

Characterization of the standard platinum/silica catalyst EUROPT-1. VI. Catalytic properties (41)313

Skeletal reactions of n-hexane over Pt/SiO_2 (EUROPT-1). Mechanism changeover governed by hydrogen (43)L1

Hydrogenolysis of methyltetrahydrofuran on platinum. II. Effects of self-poisoning and evaluation of structure sensitivity (44)239

Slow uptake of oxygen and carbon monoxide by platinum/silica (EUROPT-1) and subsequent effects on

hydrogenation of benzene and hydrogenolysis of methylcyclopentane (42)337

Exhaust catalyst

Exhaust-catalyst development for methanol-fueled vehicles. III. Formaldehyde oxidation (44)73

Expert systems

Expert systems approach to computer-aided design of catalysts (48)107

Performance of promoted SnO_2 catalysts designed by an expert systems approach for oxidative dehydrogenation of ethylbenzene (50)L13

Extra-framework aluminium

Extraction of extra-framework aluminium in ultra-stable Y zeolites by $(\text{NH}_4)_2\text{SiF}_6$ treatments. I. Physico-chemical characterization (59)267

F

Faujasite

Cyclization of citronellal to isopulegol by zeolite catalysis (47)363

Conversion of methanol on ultrastable faujasitic catalysts. Selective formation of hexamethylbenzene (42)195

Formation and hydrolysis of acetals catalysed by acid faujasites (59)333

FCC catalysts

Catalytic properties in cyclohexene transformation of modified HY zeolites (60)101

Feed composition

Comments on "Claus Reaction: Effect of forced feed composition cycling" (50)303

Reply to "Comments on Claus Reaction: Effect of forced feed composition cycling" (50)307

Fibrillar alumina

Fibrillar alumina as a wash-coat on monoliths in the catalytic oxidation of xylene (55)123

Fischer-Tropsch synthesis

Comments on induction periods for synthesis of hydrocarbons from syngas over metal/zeolite catalysts using a two stage process (43)193

Selective transformation of methanol into light olefins on metallic catalysts (42)299

Methane to higher hydrocarbons — review (47)173

Investigation of Kölbl-Engelhardt synthesis over iron-based catalysts (47)205

Carbon monoxide hydrogenation over metal loaded aluminophosphates (47)225

Supported metal cluster compounds as precursors of Fischer-Tropsch catalysts (47)239

Application of Co-Mn₂O₃-Ru catalyst to the process for producing high-calorie substitute natural gas from coke oven gas (47)193

Sulfur poisoning of Fischer-Tropsch synthesis catalysts in a fixed-bed reactor (47)249

New iron/nickel alloy catalyst for Fischer-Tropsch synthesis (57)L5

Fischer-Tropsch synthesis with iron catalysts impact of alkali or added alcohol upon catalytic activity and product selectivity (56)95

Effects of pretreatment on the surface properties of iron Fischer-Tropsch catalysts (48)199

Synthesis of motor fuels from HY-zeolite supported Fischer-Tropsch iron catalysts (55)47

Product distributions of the Fischer-Tropsch synthesis on precipitated iron catalysts (52)93

Fischer-Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties (52)193

Alcohol synthesis from syngas on group VIII metal catalysts promoted by Mo-Na₂O (49)213

Novel catalyst for liquid phase Fischer-Tropsch synthesis: Potassium-promoted copper-iron ultrafine particles prepared by liquid-phase chemical deposition (47)L1

Performance testing with a gas-liquid-solid system in a mechanically stirred reactor: the Fischer-Tropsch synthesis (56)231

Fixed-bed reactor

Sulfur poisoning of Fischer-Tropsch synthesis catalysts in a fixed-bed reactor (47)249

Flue gas desulphurisation

Flue gas desulphurisation: Catalytic removal of sulphur dioxide by carbon monoxide on sulphided La_{1-x}Sr_xCoO₃. I. Adsorption of sulphur dioxide, carbon monoxide and their mixtures (41)273

Flue gas desulphurisation: Catalytic removal of sulphur dioxide by carbon monoxide on sulphided La_{1-x}Sr_xCoO₃. II. Reaction of sulphur dioxide and carbon monoxide in a flow system (41)289

Fluid catalytic cracking

FCC catalyst performance evaluation (43)213

Octane enhancement in fluid catalytic cracking. II. Operation in the overcracking regime (58)19

Octane enhancement in fluid catalytic cracking. I. Role of ZSM-5 addition and reactor temperature (58)1

Fluorination

Heterogeneous catalytic reactions of chlorofluorocarbons (59)123

Fluorine

Molybdena-alumina interaction chemistry: Effect of preadsorbed sulphate and fluorine anions on the dispersion of molybdenum (55)215

Effect of fluorine on hydrogenation of cyclohexene on sulfided Ni (or Co)-Mo/Al₂O₃ catalysts (57)223

Formaldehyde

Novel type of catalyst for the pure dehydrogenation of methanol to formaldehyde (59)L1

Formaldehyde oxidation

Exhaust-catalyst development for methanol-fueled vehicles. III. Formaldehyde oxidation (44)73

Formaldehyde-benzene condensation

Zeolites in organic reactions. Condensation of formaldehyde with benzene in the presence of HY zeolites (51)113

Formate

Methanol synthesis on Cu/ZnAl₂O₄ and Cu/ZnO-Al₂O₃ catalysts: Influence of carbon monoxide pretreatment on the formation and concentration of formate species (59)165

Formic acid

Temperature-programmed desorption studies on Pd/CeO₂ after methanol and formic acid adsorption and carbon monoxide-hydrogen reaction (50)43

Furan oxidation

Effect of support material on the catalytic performance of V₂O₅/P₂O₅ catalysts for the selective oxidation of but-1-ene and furan to maleic anhydride and its conse-

cutive nonselective oxidation. I. Results of catalytic testing (45)1

Fused iron

Activity and thermoresistance of fused iron catalysts for ammonia synthesis (58)29

Influence of water soaking on the structure and properties of fused-iron catalyst for ammonia synthesis (55)33

Effect of pressure on the reduction rate of a fused iron catalyst for ammonia synthesis (54)111

G

Gadolinium-manganese oxide

Oxidative coupling of methane over calcium manganate and gadolinium manganate perovskites promoted with sodium pyrophosphate (60)119

GaHZSM5

Conversion of light alkanes to aromatic hydrocarbons. II. Role of gallium species in propane transformation on GaHZSM5 catalysts (43)155

Galloaluminosilicate

Aromatization of n-hexane over galloaluminosilicate and gallosilicate (55)115

Gallosilicate

Aromatization of n-hexane over galloaluminosilicate and gallosilicate (55)115

Determination of framework concentrations of gallium in [Ga]-ZSM-5 (54)177

Gas-phase acetoxylation

Gas-phase acetoxylation of 1,3-butadiene over palladium catalysts. V. X-ray photoelectron spectroscopic study of Pd-Sb-V-CsCl-KOAc catalyst (50)119

Gasification

Catalytic gasification of carbon: Method for the determination of the activity of alkali metal catalysts in the gasification of highly pure amorphous and graphitic carbons with steam (50)199

Gasoil

Catalytic cracking of gasoil: Benefits in activity and selectivity of small Y zeolite crystallites stabilized by a higher silicon-to-aluminium ratio by synthesis (55)65

Gasoline

Effect of acidity of HZSM-5 type zeolite on conversion of alkenes and alkanes to gasoline and aromatics (59)75

Conversion of propene into gasoline and middle distillate using alkalised ZSM-5 zeolite catalysts (45)L1

FCC catalyst performance evaluation (43)213

Geocatalysis

Low-temperature hydrocarbon conversion over rare-earth-exchanged zeolite X catalyst (42)169

Glucose

Catalytic hydrogenation on Raney nickel catalyst modified by chromium hydroxide deposition (49)91

Glycol

Methyl formate as a new building block in C₁ chemistry — a review (57)1

Control of porosity and surface area in alumina: II. Alcohol and glycol additives (56)187

Granulated alumina

Study of structural and mechanical properties of granulated alumina supports using X-ray microprobes (55)75

Group VIII metal cyanide

Adsorption of group VIII metal cyanide complexes on acid-modified γ -alumina. Preparation of new supported metallic catalysts (49)255

Group VIII metals

Alcohol synthesis from syngas on group VIII metal catalysts promoted by Mo-Na₂O (49)213

H

Haematite

Synthesis of 2,6-xlenol by alkylation of phenol with methanol (47)347

Halogen exchange

Radiotracers in fluorine chemistry. XIII. Catalysis by fluorinated surfaces: The interaction of [^{36}Cl]-chlorine labelled hydrogen chloride and 1,1-dichlorotetrafluoroethane with fluorinated chromia catalysts (52)69

Heptane

Coking and deactivation of zeolites - a review (54)1

Heptane conversion

Preparation of PtHY catalysts. Influence on the catalytic properties of the complexes used as platinum precursors (45)325

Heptane cracking

Influence of cerium on the catalytic properties of ZSM-20 zeolite in the cracking of n-heptane: Comparison with rare earth Y zeolites (49)175

Heptane reforming

Steam reforming of n-heptane using a Rh/MgAl₂O₄ catalyst (47)75

Heteroatom-substituted benzenes

Catalytic hydrogenolysis of heteroatom-substituted benzenes (52)57

Heteropolyanion complexes

Novel hydrotreating catalysts prepared from heteropolyanion complexes impregnated on alumina (48)187

Hexamethylbenzene

Conversion of methanol on ultrastable faujasitic catalysts. Selective formation of hexamethylbenzene (42)195

Hexane aromatization

Aromatization of n-hexane over Pt-KL catalyst (51)L7

Aromatization of n-hexane over galloaluminosilicate and gallosilicate (55)115

Structural recognition and preorganization in zeolite catalysis: Direct aromatization of n-hexane on zeolite L-based catalysts (45)L15

Hexane conversion

Limitation of n-hexane and 3-methylpentane conversion over zeolite ZSM-5 by intracrystalline diffusion (59)311

Hexane cracking

Mechanism of hexane cracking in ZSM-5 (60)137

Catalytic activity and product distribution in the cracking of n-hexane over heteropoly oxometalates and ZSM-5 zeolite (47)95

Quality control in the preparation of zeolite ZSM-5 using a catalytic test reaction (55)259

Hexene hydrogenation

Effect of phosphorus on molybdenum-based hydrotreating catalysts. I. Characterization of the oxidic state of P-Mo/Al₂O₃ systems (48)341

High-temperature reduction

Effect of high-temperature reduction on carburization of alumina-supported palladium: evidence for palladium-aluminium alloy formation (54)267

Higher alcohol synthesis

Higher alcohol synthesis over alkali metal-promoted high-temperature methanol catalysts (47)313

Effect of preparation parameters on the catalytic nature of potassium promoted Cu-Co-Cr higher alcohol catalysts (44)153

Highly dispersed metal

Thermal decomposition of metal carbonyls on oxide supports containing surface hydrides: A route to highly dispersed metal catalysts with unusual properties (55)235

Homogeneous precipitation

Characterization of the standard nickel/silica catalyst EuroNi-1. II. Chemical aspects: precipitation, reduction and chemical analysis (54)65

Characterization of the standard nickel/silica catalyst EuroNi-1. I. Background aims, organization and outline (54)59

Honeycomb supports

Distributions of HF co-impregnated rhodium, platinum and palladium in alumina honeycomb supports (55)271

Co-impregnation of rhodium into alumina honeycombs with acids and salts (56)107

Hydration

ESCA study of copper catalysts used for the hydration of acrylonitrile to acrylamide (47)339

Hydride-forming alloys

Efficient dehydrogenation of methanol using hydride-forming alloys (Zr₂Ni, R₂Co₇ and RFe₂) as hydrogen acceptors (58)165

Hydrocarbon partial oxidation

Transient response studies of C_4 hydrocarbon oxidation over $MnMoO_4/MoO_3$ catalysts (58)305

Hydrocarbon reforming

Hydrocarbon reforming on $Pt-Re-S/Al_2O_3-Cl$ coked in a commercial reactor (52)249

Hydrocarbon synthesis

Hydrocarbon synthesis over palladium/ZSM-5 bifunctional catalysts (41)65

Hydrocarbonylation

The selectivity problem in the homogeneous carbonylation and hydrocarbonylation of alcohols and esters — A review (50)99

Hydrochlorination

Vapour phase hydrochlorination of acetylene with group VIII and IB metal chloride catalysts (43)33

Hydrocracking

^{13}C -NMR characterization of organic residues on spent hydroprocessing, hydrocracking and demetallization catalysts (55)81

Catalytic hydroprocessing of simulated coal tars. I. activity of a sulphided $Ni-Mo/Al_2O_3$ catalyst for the hydroconversion of model compounds (54)91

Catalytic hydroprocessing of simulated coal tars. II. Effect of acid catalysts on the hydroconversion of model compounds on a sulphided $Ni-Mo/Al_2O_3$ catalyst (54)101

Hydrocracking catalysts

Characterization of hydro-cracking catalysts by acidity measurements (47)45

New catalyst for hydrocracking of vacuum residue (51)213

Hydrodealkylation

Catalytic hydrodealkylation of tar acids (45)39

Hydrodehalogenation

Selective hydrodehalogenation of an olefinic compound on doubly poisoned palladium-carbon catalyst: the mechanism of metal ion poisoning (57)71

Hydrodemetallation

Performance of the Minilith — A shaped hydrodemetallation catalyst (42)47

Effect of catalyst composition on the hydrodesulphurization and hydrodemetallation of atmospheric residual oil (45)221

Hydrodenitrogenation

Hydrodenitrogenation of simple aromatic amines on molybdena catalysts (46)241

Non-existence of synergism in the hydrodenitrogenation of pyridine over carbon-supported cobalt-molybdenum sulphide catalysts (45)L23

Novel hydrotreating catalysts prepared from heteropolyanion complexes impregnated on alumina (48)187

Hydrodenitrogenation using ternary metal catalyst on mixed zeolite- γ -alumina supports (47)331

Hydrodeoxygenation

Influence of sulphur level on hydrodeoxygenation (52)41

Hydrodesulphurization

Hydrodesulfurization activity of WO_3/γ -alumina prepared by the equilibrium adsorption method (59)185

Model hydrodesulfurization catalysts: solid state synthesis and characterization of iron containing molybdenum sulphide (56)281

Upflow versus downflow testing of hydrotreating catalysts (43)237

Characterization and deactivation of $NiO-ThO_2$ catalysts (48)159

Novel type of carbon-supported catalysts. II. Activity measurements (49)319

Catalytic hydrodesulphurization of terpenes (50)87

Sulfidation of carbon-supported iron oxide catalysts (51)263

Thiophene hydrodesulfurization on fresh, spent, and treated catalysts (51)295

Studies of molybdena-alumina catalysts. XV. Effect of fluorine-modified alumina on catalyst properties (49)247

Hydrodesulphurization activity and characterization of sulphided molybdenum and cobalt-molybdenum catalysts. Comparison of alumina-, silica-alumina- and titania-supported catalysts (52)211

Thiophene hydrodesulphurization activity of alumina-, silica- and carbon-supported sulphided Re_2O_7 catalysts (48)241

Thermal stability of $Co-Mo/Al_2O_3$ hydrodesulphurization catalyst (52)181

Effect of thermal treatment on the sintering and structural changes of cobalt-molybdenum/alumina and nickel-molybdenum/alumina hydrotreating catalysts (41)109

Nitric oxide chemisorption and temperature-programmed desorption study of cobalt and molybdenum catalysts supported on activated carbon and alumina (42)307

Synergy in hydrodesulfurization and hydrogenation on mechanical mixtures of cobalt sulfide on carbon and MoS_2 on alumina (51)121

Influence of phosphorus concentration on the type and structure of the compounds formed in the oxide form of phosphorus-nickel-molybdenum/alumina catalysts for hydrodesulfurization (48)295

Study of low-percentage alumina-supported nickel-molybdenum catalysts by ESR spectroscopy and magnetic measurements (48)177

Effect of catalyst composition on the hydrodesulfurization and hydrodemetallization of atmospheric residual oil (45)221

Temperature-programmed reduction of $\text{NiO} \cdot \text{WO}_3/\text{Al}_2\text{O}_3$ hydrodesulfurization catalysts (46)11

Effect of phosphorus on molybdenum-based hydrotreating catalysts. II. Hydrodesulfurization activity and characterization of the sulphided state of $\text{P-Mo}/\text{Al}_2\text{O}_3$ systems (48)353

Characterization of γ -alumina-supported Tungsten sulfide hydroprocessing catalysts. I. Low-temperature oxygen chemisorption (41)165

Novel hydrotreating catalysts prepared from heteropolyanion complexes impregnated on alumina (48)187

Effect of phosphorus on the surface state of alumina-supported nickel-molybdenum catalysts for hydrodesulfurization (56)163

Iron sulphide containing hydrodesulfurization catalysts. Mössbauer study of the sulphidability of α -iron(III) oxide (42)153

Influence of the nature of the activating molecules on the catalytic activity of cobalt-molybdenum/alumina catalysts (46)113

Supported iridium catalysts. Comparison between resistance to sulphur poisoning and hydrodesulfurization properties (57)99

Existence of synergy between " CoMoS " and Co_9S_8 : New proof of remote control in hydrodesulfurization (50)17

Hydrofluoric acid

Distributions of HF co-impregnated rhodium, platinum and palladium in alumina honeycomb supports (55)271

Effects of drying on the preparation of HF co-impregnated rhodium/ Al_2O_3 catalysts (55)287

Hydroformylation

Selective hydroformylation of ethene and propene catalysed on NaY zeolite-entrapped Rh_6 and bimetallic RhFe clusters and their structural characterization by extended X-ray absorption fine structure and Fourier transform infrared spectroscopy (50)294

Hydrogen acceptors

Efficient dehydrogenation of methanol using hydride-forming alloys (Zr_2Ni , R_2Co_7 and RFe_2) as hydrogen acceptors (58)165

Hydrogen back-spillover

Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane steam-cracker (52)1

Hydrogen mordenite

Coke formation through the reaction of ethene over hydrogen mordenite. II. IR and ^{13}C -NMR studies (45)345

Hydrogen peroxide

Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium-silicate zeolites (57)11

Hydrogen storage

Catalytic storage of hydrogen: Hydrogenation of toluene over a nickel/silica aerogel catalyst in integral flow conditions (42)121

Hydrogen transfer

Influence of the level of dealumination on the selective adsorption of olefins and paraffins and its implication on hydrogen transfer reactions during catalytic cracking on USY zeolites (47)123

Kinetic study of hydrogen transfer of olefins under catalytic cracking conditions (58)35

Reduction of acetophenone with palladium catalysts by hydrogen transfer and with molecular hydrogen (43)41

Hydrogen-oxygen titrations

Study of supported iridium catalysts by hydrogen-oxygen titrations. Influence of the support (58)175

Hydrogenation

Reaction selectivity as a test for catalysis on exposed metal (48)235

Catalysis with permselective inorganic membranes — a review (49)1

Structure of Raney nickel catalysts modified by chromium hydroxide deposition (56)57

Selective hydrogenation of α,β -unsaturated aldehydes on cobalt-silica catalysts obtained from cobalt chrysotile (56)9

Hydrogenation of 1,3-butadiene on Pt(111). Comparison with results on Pt(110) and Pt(100) (43)177

Hydrogenation of carbon dioxide over copper-zirconia catalysts prepared by in-situ activation of amorphous copper-zirconium alloy (48)279

Thiophene hydrodesulphurization activity of alumina-, silica- and carbon-supported sulphided Re_2O_7 catalysts (48)241

Selective hydrogenation of neat isoquinoline. I. Activities of some commercial catalysts and effects of coexisting sulphur-containing compounds in the substrate (41)99

Effect of phosphorus on molybdenum-based hydrotreating catalysts. I. Characterization of the oxidic state of P-Mo/ Al_2O_3 systems (48)341

Synergy in hydrodesulfurization and hydrogenation on mechanical mixtures of cobalt sulfide on carbon and MoS_2 on alumina (51)L21

Catalytic hydrogenation on Raney nickel catalyst modified by chromium hydroxide deposition (49)91

Novel hydrotreating catalysts prepared from heteropolyanion complexes impregnated on alumina (48)187

New approach to skeletal nickel catalysts. Catalytic properties of the nickel-chromium system (42)285

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts II: Influence of various compounds containing

phosphorus, oxygen, sulphur and chloride on the catalytic performance of platinum catalyst (49)235

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts. I: Influence of nitrogen-containing compounds (49)219

Selective regeneration of catalytic functions of Pt-Re-S/ Al_2O_3 -Cl during coke burning (56)1

Calorimetric study of the coadsorption of hydrogen and carbon monoxide over ruthenium graphitized carbon black catalysts (55)21

Slow uptake of oxygen and carbon monoxide by platinum/silica (EUROPT-1) and subsequent effects on hydrogenation of benzene and hydrogenolysis of methylcyclopentane (42)337

Hydrogenolysis

Catalytic hydrogenolysis of heteroatom-substituted benzenes (52)57

Hydrogenolysis and isomerization of alkanes on Ru/ Al_2O_3 catalysts of varying dispersions (59)103

Hydrogenolysis of light hydrocarbons on rhodium/titania. Strong metal-support interactions and analysis of kinetic data (41)L1

Synthesis and characterization of bimetallic clusters prepared by sublimation of $\text{Re}_2(\text{CO})_{10}$ onto Pt/NaY (46)45

Hydrogenolysis of methyltetrahydrofuran on platinum. II. Effects of self-poisoning and evaluation of structure sensitivity (44)239

Slow uptake of oxygen and carbon monoxide by platinum/silica (EUROPT-1) and subsequent effects on hydrogenation of benzene and hydrogenolysis of methylcyclopentane (42)337

Sulphide catalysts on silica as a support. VII. Isotope exchange of hydrogen sulphide with sulphided catalysts (45)183

Hydroisomerization

Hydroisomerization of branched-chain olefins over Pt/H-ZSM-5 zeolite (47)67

Hydrophobic catalysts

PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. I. Preparation and characterization (43)1

PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. II. Water poisoning (43)15

Hydroprocessing

^{13}C -NMR characterization of organic residues on spent hydroprocessing, hydrocracking and demetallization catalysts (55)81

Hydrothermal treatment

Effect of hydrothermal treatment on alumina as support for noble metal catalysts (59)89

Hydrotreating

Pilot plant testing of hydrotreating catalysts: Influence of catalyst condition, bed loading and dilution (43)251

Hydrotreating catalyst

Mechanism for coking of coal liquefaction catalysts involving basic nitrogen compounds, sodium and catalyst acid sites (44)199

Adsorption mechanism of phosphorus on alumina (41)261

Upflow versus downflow testing of hydrotreating catalysts (43)237

Regeneration of spent hydroprocessing catalysts: Metals removal (47)83

Effect of nickel on the surface acidity of γ -alumina and alumina-supported nickel-molybdenum hydrotreating catalysts (50)237

Effect of phosphorus on molybdenum-based hydrotreating catalysts. I. Characterization of the oxidic state of P-Mo/Al₂O₃ systems (48)341

Model planar alumina catalyst preparation and aging under hydrotreating conditions (50)65

Effect of phosphorus on molybdenum-based hydrotreating catalysts. II. Hydrodesulphurization activity and characterization of the sulphided state of P-Mo/Al₂O₃ systems (48)353

Effect of oxygen concentration on temperature runaway during regeneration of hydrotreating catalyst (44)189

Novel hydrotreating catalysts prepared from heteropolyanion complexes impregnated on alumina (48)187

Hydrotreating reactors

Design of laboratory hydrotreating reactors scaling down of trickle-flow reactors (43)273

Hydroxylation

Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium-silicate zeolites (57)L1

I

Impregnation

Characterization of silica-supported copper catalysts by means of temperature-programmed reduction (60)181

In-situ activation

Hydrogenation of carbon dioxide over copper-zirconia catalysts prepared by in-situ activation of amorphous copper-zirconium alloy (48)279

In-situ infrared spectroscopy

Effect of support material on the adsorption structures of furan and maleic anhydride on the surface of V₂O₅/P₂O₅ catalysts. II. Results of in situ infrared spectroscopic studies (45)9

Induction periods

Comments on induction periods for synthesis of hydrocarbons from syngas over metal/zeolite catalysts using a two stage process (43)193

Infrared spectroscopy

Infrared and calorimetric studies of the adsorption of carbon monoxide on zeolite-supported iridium catalysts (46)227

Inhibited oxidation

Ethylene oxide oxidation over a supported silver catalyst. II: Kinetics of inhibited oxidation (41)39

Inorganic membranes

Catalysis with permselective inorganic membranes — a review (49)1

Inorganic salt

Inorganic salt catalysis in the process for the conversion of alcohols/alkylphenols into ethoxychloride surfactant intermediates (46)313

Ion exchange

Ethanol conversion over ion-exchanged ZSM-5 zeolites (59)13

Characterization of silica-supported copper catalysts by means of temperature-programmed reduction (60)181

Oligomerization of ethene over nickel-exchanged zeolite Y into a diesel-range product (42)325

Ion-exchange resins

Catalytic activity of sulphonated styrene-divinylbenzene resins (48)307

Iridium

Metallic area of supported iridium catalysts (54)203

Study of supported iridium catalysts by hydrogen-oxygen titrations. Influence of the support (58)175

Iridium/alumina

Interaction between iridium and platinum precursors in the preparation of iridium platinum catalysts (42)61

Supported iridium catalysts. Comparison between resistance to sulphur poisoning and hydrodesulphurization properties (57)99

Iridium/magnesia

Supported iridium catalysts. Comparison between resistance to sulphur poisoning and hydrodesulphurization properties (57)99

Iridium/NaY zeolite

Infrared and calorimetric studies of the adsorption of carbon monoxide on zeolite-supported iridium catalysts (46)227

Iridium/silica-alumina

Supported iridium catalysts. Comparison between resistance to sulphur poisoning and hydrodesulphurization properties (57)99

Investigation of Kölbel-Engelhardt synthesis over iron-based catalysts (47)205

Iron complexes used for the preparation of zeolites supported iron catalysts (56)L1

Fischer-Tropsch synthesis with iron catalysts impact of alkali or added alcohol upon catalytic activity and product selectivity (56)95

Influence of water soaking on the structure and properties of fused-iron catalyst for ammonia synthesis (55)33

Effects of pretreatment on the surface properties of iron Fischer-Tropsch catalysts (48)199

Performance testing with a gas-liquid-solid system in a mechanically stirred reactor: the Fischer-Tropsch synthesis (56)231

Iron/allophane

New catalyst for hydrocracking of vacuum residue (51)213

Iron/AlPO₄

Carbon monoxide hydrogenation over metal loaded aluminophosphates (47)225

Iron/alumina

Hydrogenation of carbon monoxide over iron catalysts on different supports (50)211

Iron-based ammonia synthesis catalysts prepared via non-oxidic precursors (59)249

Adsorption of group VIII metal cyanide complexes on acid-modified γ -alumina. Preparation of new supported metallic catalysts (49)255

Fischer-Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties (52)193

Iron/carbon

Carbon-supported, (alkali metal) $(\text{Fe}_2\text{Mn}(\text{CO})_{12})$ -derived catalysts. Adsorption properties and catalytic behavior in carbon monoxide hydrogenation (51)93

Iron/magnesia

Hydrogenation of carbon monoxide over iron catalysts on different supports (50)211

Iron manganese oxide

Manganese oxide water-gas shift catalysts. Initial optimization studies (51)127

Iron/nickel

New iron/nickel alloy catalyst for Fischer-Tropsch synthesis (57)L5

Iron oxide

Activity decay of potassium-promoted iron oxide catalyst for dehydrogenation of ethylbenzene (51)203

Iron oxide-iron phosphate

Deactivation of iron oxide-iron phosphate catalyst in isopropanol dehydration (55)181

Iron/silica

Thermal decomposition of metal carbonyls on oxide supports containing surface hydrides: A route to highly dispersed metal catalysts with unusual properties (55)235

Preparation and properties of small silica-supported iron catalyst particles. Influence of reduction procedure (48)327

Product distributions of the Fischer-Tropsch synthesis on precipitated iron catalysts (52)93

Fischer-Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties (52)193

Iron sulphide/carbon

Sulfidation of carbon-supported iron oxide catalysts (51)263

Iron/titania

Hydrogenation of carbon monoxide over iron catalysts on different supports (50)211

Iron/zeolite

Hydrogenation of carbon monoxide over iron catalysts on different supports (50)211

Preparation of iron/zeolite catalysts active for toluene disproportionation in the presence of hydrogen sulphide (43)57

Iron-molybdenum sulphide/carbon

Sulphidation of carbon-supported iron-molybdenum oxide catalysts (54)217

Iron-cobalt/silica

Supported metal cluster compounds as precursors of Fischer-Tropsch catalysts (47)239

Iron-manganese/carbon

Carbon-supported, (alkali metal) $(\text{Fe}_2\text{Mn}(\text{CO})_{12})$ -derived catalysts. Adsorption properties and catalytic behavior in carbon monoxide hydrogenation (51)93

Iron-nickel

Relationship between the catalytic properties and surface composition of a polycrystalline Fe-Ni ribbon (58)219

Iron-rhenium/silica

Morphology and catalytic activity of FeRe bimetallic catalysts supported on silica. II. Catalytic activity in the carbon monoxide-hydrogen reaction (51)49

Morphology and catalytic activity of iron-rhenium bimetallic catalysts supported on silica. I. Temperature-programmed reduction, X-ray photoelectron spectroscopy and Mössbauer study (51)33

Iron-titanium

Coal liquefaction using an intermetallic hydride to distribute hydrogen and catalyze the reaction (44)53

Isomerization

Catalytic hydrodesulphurization of terpenes (50)87

Surface passivation and shape selectivity in xylene isomerization over ZSM-48 (55)265

Cracking of C_9 paraffins over xylene isomerization catalysts (57)179

Activity and selectivity modifications produced by coke deposition on mono- and bimetallic reforming catalysts (53)53

Hydrogenolysis and isomerization of alkanes on Ru/ Al_2O_3 catalysts of varying dispersions (59)103

Kinetic study of hydrogen transfer of olefins under catalytic cracking conditions (58)35

Selective regeneration of catalytic functions of Pt-Re-S/ Al_2O_3 -Cl during coke burning (56)1

Isomerization and disproportionation of *m*-xylene selectivities induced by the void structure of the zeolite framework (45)85

Isophorone aromatization

Aromatization of isophorone to 3,5-xenol (48)223

Isopropanol dehydration

Deactivation of iron oxide-iron phosphate catalyst in isopropanol dehydration (55)181

Isopulegol synthesis

Cyclization of citronellal to isopulegol by zeolite catalysis (47)363

Isoquinoline

Selective hydrogenation of neat isoquinoline. II. Reaction pathway over Raney nickel (43)71

Isoquinoline hydrogenation

Selective hydrogenation of neat isoquinoline. I. Activities of some commercial catalysts and effects of coexisting sulphur-containing compounds in the substrate (41)99

Isotope exchange

The role of tin in supported rhodium-tin bimetallic catalysts (47)25

Sulphide catalysts on silica as a support. VII. Isotope exchange of hydrogen sulphide with sulphided catalysts (45)183

PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. I. Preparation and characterization (43)1

PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. II. Water poisoning (43)15

Isotopic exchange measurements of the rate of interconversion of carbon monoxide and carbon dioxide over nickel supported on rare earth oxides (58)255

Relationship between the catalytic properties and surface composition of a polycrystalline Fe-Ni ribbon (58)219

Ethylene homologation reaction in the presence of metathesis on $\text{MoO}_3/\text{SiO}_2$ catalyst: Selectively promoted by adding copper (50)15

Isotopic labelling

Ethylene homologation reaction in the presence of metathesis on $\text{MoO}_3/\text{SiO}_2$ catalyst: selectively promoted by adding copper (50)15

K

Keto esters

Enantioselective hydrogenation of α -keto esters: Temperature-programmed reduction study of liquid-phase $\text{Pt}/\text{Al}_2\text{O}_3$ hydrogenation catalysts (52)19

Kieselguhr

Kinetic model of nitrobenzene hydrogenation to aniline over industrial copper catalyst considering the effects of mass transfer and deactivation (59)31

Kinetics

Effects of sintering on the active site distribution on promoted catalysts (45)115

Role of Brønsted and Lewis acid sites during cracking reactions of alkanes (47)33

Steam reforming of n-heptane using a $\text{Rh}/\text{MgAl}_2\text{O}_4$ catalyst (47)75

Regeneration of spent hydroprocessing catalysts: Metals removal (47)83

Kinetic and mechanistic studies of nickel-catalysed olefin oligomerization (48)1

Reaction selectivity as a test for catalysis on exposed metal (48)235

Catalytic activity of sulphonated styrene-divinylbenzene resins (48)307

Effect of steam on the coking of platinum catalysts. II. Kinetics (49)75

Support and crystallite size effects in ethylene oxidation catalysis (50)171

Catalytic hydrodesulphurization of terpenes (50)87

Catalytic reaction selectivity in unsteady states (53)89

Potassium promotion of $\text{Ni}/\text{Al}_2\text{O}_3$ catalysts (54)159

Determination of framework concentrations of gallium [Ga]-ZSM-5 (54)177

Oxidative coupling of methane over thallium based silica supported catalysts (54)241

Aromatization of n-hexane over galloaluminosilicate and gallosilicate (55)115

Influence of phosphorus in vanadium-containing catalysts for NO_x removal (55)151

Surface passivation and shape selectivity in xylene isomerization over ZSM-48 (55)265

Oxidative coupling of methane over chloride catalysts (56)219

Cracking reactions of C_6 paraffins on HZSM-5 (57)105

Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects (57)215

C_2 oxygenate synthesis from CO hydrogenation on AgRh/SiO_2 (57)241

Hydrogenation of ethyne over an ion-exchanged copper on silica catalyst (58)209

Activity and thermoresistance of fused iron catalysts for ammonia synthesis (58)29

Heterogeneous catalytic transfer hydrogenation reactions of 4-nitrophenylamine (59)1

Heterogeneous catalytic reactions of chlorofluorocarbons (59)123

- Ethanol conversion over ion-exchanged ZSM-5 zeolites (59)13
- Oxidative coupling of methane over Ba/CaO catalysts. A comparison with Li/MgO (59)291
- Formation and hydrolysis of acetals catalysed by acid faujasites (59)333
- Carbon-supported, (alkali metal) $(\text{Fe}_2\text{Mn}(\text{CO})_{12})$ -derived catalysts. Adsorption properties and catalytic behavior in carbon monoxide hydrogenation (51)93
- Catalytic storage of hydrogen: Hydrogenation of toluene over a nickel/silica aerogel catalyst in integral flow conditions (42)121
- Nickel-based heterogeneous catalysts for olefin oligomerization. I. Support and anion effects (42)205
- Hydrogenation of 1,3-butadiene on Pt(111). Comparison with results on Pt(110) and Pt(100) (43)177
- Influence of the level of dealumination on the selective adsorption of olefins and paraffins and its implication on hydrogen transfer reactions during catalytic cracking on USY zeolites (47)123
- Design of synthetic zeolites as catalysts in organic reactions: Acylation of anisole by acyl chlorides or carboxylic acids over acid zeolites (49)109
- Hydrogenation of carbon dioxide over copper-zirconia catalysts prepared by in-situ activation of amorphous copper-zirconium alloy (48)279
- Design of a potassium-promoted $\text{Rh}/\alpha\text{-Al}_2\text{O}_3$ catalyst for synthesis of C_2 oxygenates by pulse surface reaction rate analysis (55)225
- Activity and sulphur tolerance of monophase spinels in carbon monoxide and C_xH_y oxidation (47)141
- Supported copper catalysts prepared from copper(II) formate. Hydrogenation of carbon dioxide containing feedstocks (48)365
- Modelling catalyst-support interactions in carbon monoxide oxidation catalysed by Pd/SnO_2 (49)55
- Kinetic model of nitrobenzene hydrogenation to aniline over industrial copper catalyst considering the effects of mass transfer and deactivation (59)31
- Hydrogenation of carbon dioxide and carbon monoxide over supported rhodium catalysts under 10 bar pressure (46)1
- Synthesis of motor fuels from HY-zeolite supported Fischer-Tropsch iron catalysts (55)47
- Hydrogenolysis and isomerization of alkanes on $\text{Ru}/\text{Al}_2\text{O}_3$ catalysts of varying dispersions (59)103
- Semiconductivity study of ceria-supported nickel related to its methanation catalytic activity (53)117
- Coal liquefaction using an intermetallic hydride to distribute hydrogen and catalyze the reaction (44)53
- Kinetic study of hydrogen transfer of olefins under catalytic cracking conditions (58)35
- Kinetic study of the low-temperature water-gas shift reaction over a Cu-ZnO catalyst (49)285
- Methanol synthesis from hydrogen, carbon monoxide, and carbon dioxide over a $\text{CuO}/\text{ZnO}/\text{Al}_2\text{O}_3$ catalyst. I. Steady-state kinetics experiments (50)247
- Enhancing effect of hydrogen on the catalytic activity of trisilver dodecatungstophosphate for the isomerization of 1-butene (55)301
- In situ study of catalysts. Application in methanol synthesis and ethylene epoxidation (43)311
- Influence of reaction conditions of the effect of co-feeding ethene in the Fischer-Tropsch synthesis on a fused-iron catalyst in the liquid phase (53)1
- Shape selectivity in Y-zeolites. Catalytic cracking of decalin-isomers in fixed bed micro reactors (58)105
- Effectiveness of reaction proceeding with degree kinetics in a plate catalyst grain (46)189
- Activity and selectivity of $\text{Pd}/\alpha\text{-Al}_2\text{O}_3$ for ethyne hydrogenation in a large excess of ethene and hydrogen (58)227
- Influence of the support towards platinum catalysed 1,3-butadiene hydrogenation (58)241
- Sulphide catalysts on silica as a support. VIII. Peculiarities of thiophene hydrogenolysis and probable nature of "synergetic effect" (45)191
- Characterization of γ -alumina-supported Tungsten sulfide hydroprocessing catalysts. I. Low-temperature oxygen chemisorption (41)165
- PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. II. Water poisoning (43)15
- Ethylene oxide oxidation over a supported silver catalyst. II: Kinetics of inhibited oxidation (41)39
- Limitation of n-hexane and 3-methylpentane conversion over zeolite ZSM-5 by intracrystalline diffusion (59)311

Kinetics and mechanism of oxidative coupling of methane over lanthanum-boron oxide (47)273

Kinetic and mechanistic aspects of the oxidative coupling of methane over a Li/MgO catalyst (52)131

Reaction path of the oxidative coupling of methane over a lithium-doped magnesium oxide catalyst. Factors effecting the rate of total oxidation of ethane and ethylene (52)147

Zeolites as base catalysts: Condensation of aldehydes with derivatives of malonic esters (59)237

Hydrogenolysis of light hydrocarbons on rhodium/titania. Strong metal-support interactions and analysis of kinetic data (41)L1

Selective hydrogenation of neat isoquinoline. II. Reaction pathway over Raney nickel (43)71

Surface and sub-surface oxidation of copper and supported copper catalysts by nitrous oxide (46)161

Comparative study of nitrous oxide and oxygen as oxidants for the conversion of ethylene to ethylene oxide over silver (48)37

Kinetics of the esterification of methacrylic acid with ethylene oxide in the presence of ferric chloride immobilized on polymer support (53)41

Contrast between H-ZSM-5 and H-Fe-silicates of the pentasil pore structure in propylene conversion (51)155

Conversion of ethanol in aqueous solution over ZSM-5 zeolites. Study of the reaction network (58)119

Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. II. Catalytic hydrogenation of benzene to cyclohexene and cyclohexane (58)291

Conversion of light alkanes to aromatic hydrocarbons. II. Role of gallium species in propane transformation on GaHZSM5 catalysts (43)155

Lumped kinetic model for propene-butene mixtures: oligomerization on a supported phosphoric acid catalyst (41)301

Influence of carrier doping on catalytic performance of titanium dioxide supported platinum (46)297

Effect of pressure on the reduction rate of a fused iron catalyst for ammonia synthesis (54)111

Cyclohexane hydrogenation on rhodium catalysts in the gas phase. Kinetics of the reaction and origin, mechanism and kinetics of the deactivation process (46)131

Ethylene oxide oxidation over a supported silver catalyst. I. Kinetics of uninhibited oxidation (41)23

Effect of water vapor on the activity and selectivity characteristics of a vanadium phosphate catalyst towards butane oxidation (41)225

Investigation of the effect of water and oxygen on the reaction of propylene with cobalt oxide-magnesium oxide solid solutions. I. Thermodesorption study (50)27

Catalytic cracking of gasoil: Benefits in activity and selectivity of small Y zeolite crystallites stabilized by a higher silicon-to-aluminium ratio by synthesis (55)65

Köbel-Engelhardt synthesis

Investigation of Köbel-Engelhardt synthesis over iron-based catalysts (47)205

L

Lanthanides-lithium

Oxidative coupling of methane over LnLiO_2 compounds ($\text{Ln} = \text{Sm}, \text{Nd}, \text{La}$) (51)L1

Lanthanum oxide

Comparative study of catalysts for the oxidative coupling of methane (43)105

Oxypyrolysis of natural gas (58)269

Studies on the promotion of nickel-alumina coprecipitated catalysts. II. Lanthanum oxide (45)257

Lanthanum-boron oxide

Kinetics and mechanism of oxidative coupling of methane over lanthanum-boron oxide (47)273

Lead

Effect of lead on the activity of platinum catalysts (44)261

Lead oxide-alumina

Oxidative dimerization of methane on lead oxide-alumina catalysts (45)209

Lewis acid

Role of Brønsted and Lewis acid sites during cracking reactions of alkanes (47)33

Alkylation of benzene with 2-chloropropane on chlorine-treated alumina (56)73

Lithium

Zeolites as base catalysts: Condensation of aldehydes with derivatives of malonic esters (59)237

Lithium chemistry of lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (58)131

Lithium carbonate melts

Catalytic properties of lithium carbonate melts and related slurries for the oxidative dimerization of methane (56)149

Lithium/magnesia

Oxidative coupling of methane over Ba/CaO catalysts. A comparison with Li/MgO (59)291

Lithium/magnesium oxide

Lithium chemistry of lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (58)131

Lithium oxide/magnesia

Kinetic and mechanistic aspects of the oxidative coupling of methane over a Li/MgO catalyst (52)131

Reaction path of the oxidative coupling of methane over a lithium-doped magnesium oxide catalyst. Factors effecting the rate of total oxidation of ethane and ethylene (52)147

Lithium-barium/silica

Role of carbon tetrachloride in the conversion of methane on silica-supported alkali metal added alkaline earth oxide catalysts (58)83

Lithium-magnesium oxide

Oxidative conversion of methane and C₂ hydrocarbons on oxides: Homogeneous versus heterogeneous processes (47)283

Oxidative coupling of methane over lithium-doped ultrafine crystalline magnesium oxide (47)295

Effect of additives on lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (56)119

Lithium-sodium aluminate

Novel type of catalyst for the pure dehydrogenation of methanol to formaldehyde (59)L1

Low-temperature plasma

Low-temperature plasma calcination of zeolite NH₄Na-Y (48)373

M**Magnesia**

Thermal stability of alkali metals deposited on oxide supports and their influence on the surface area of the support (42)217

Study of supported iridium catalysts by hydrogen-oxygen titrations. Influence of the support (58)175

Magnesia/alumina

Surface acidity, catalytic activity and selectivity of some oxides supported on alumina (41)1

Magnesium oxide

Comparative study of catalysts for the oxidative coupling of methane (43)105

Hexane-carbon dioxide reaction catalyzed by alkaline earth metal oxides. II. Reaction network (41)199

Effect of additives on lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (56)119

Role of chlorine in improving selectivity in the oxidative coupling of methane to ethylene (46)69

Dehydrocyclodimerization of 1,3-butadiene catalyzed by magnesium oxide and zirconium oxide (47)L7

Magnesium oxide/silica

Transformation of ethanol into 1,3-butadiene over magnesium oxide/silica catalysts (43)117

Magnesium oxide-silicon oxide

Catalytic properties of lithium carbonate melts and related slurries for the oxidative dimerization of methane (56)149

Magnesium-chromium

Synthesis of alcohols from carbon oxides and hydrogen. XVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn-

Cr-O systems in the synthesis of alcohols from carbon monoxide and hydrogen (57)253

Maleic acid hydrogenation

Effect of lead on the activity of platinum catalysts (44)261

Maleic anhydride

Effect of support material on the adsorption structures of furan and maleic anhydride on the surface of V_2O_5/P_2O_5 catalysts. II. Results of in situ infrared spectroscopic studies (45)9

Preparation of vanadium-phosphorus oxide catalysts. I. Dissolution and reduction of vanadium pentoxide and isolation of the precursor (42)91

Effect of support material on the catalytic performance of V_2O_5/P_2O_5 catalysts for the selective oxidation of but-1-ene and furan to maleic anhydride and its consecutive nonselective oxidation. I. Results of catalytic testing (45)1

Transient response studies of C_4 hydrocarbon oxidation over $MnMoO_4/MoO_3$ catalysts (58)305

Manganese

Transient response studies of C_4 hydrocarbon oxidation over $MnMoO_4/MoO_3$ catalysts (58)305

Manganese chloride

Oxidative coupling of methane over chloride catalysts (56)219

Manganese-magnesium oxide

Oxidative coupling of methane over cobalt-magnesium and manganese-magnesium mixed oxide catalysts (60)13

Manganese oxide

Comparative study of catalysts for the oxidative coupling of methane (43)105

Manganese oxide water-gas shift catalysts. Initial optimization studies (51)127

Role of chlorine in improving selectivity in the oxidative coupling of methane to ethylene (46)69

Manganese-chromium oxide spinel

Higher alcohol synthesis over alkali metal-promoted high-temperature methanol catalysts (47)313

Mass transfer coefficients

Heats of adsorption and mass transfer coefficients of alkanes in zeolites Y and ZSM-20 (53)273

Membrane reactor

Efficient dehydrogenation of methanol using hydride-forming alloys (Zr_2Ni , R_2Co_7 and RFe_2) as hydrogen acceptors (58)165

Membranes

Catalysis with permselective inorganic membranes — a review (49)1

Mesityl oxide

Base properties of modified γ -alumina (56)253

Metal cations

Addition of metal cations to magnesium oxide catalyst for the aldol condensation of acetone (48)63

Metal chloride catalysts

Vapour phase hydrochlorination of acetylene with group VIII and IB metal chloride catalysts (43)33

Metal deposition

Progress in the catalysis of the upgrading of petroleum residue: a review of 25 years of R & D on Shell's residue hydroconversion technology (47)1

Metal ion poisoning

Selective hydrodehalogenation of an olefinic compound on doubly poisoned palladium-carbon catalyst: the mechanism of metal ion poisoning (57)71

Metal oxide

Combustion of soot deposits from diesel engines on mixed oxides of vanadium pentoxide and cupric oxide (60)157

Catalytic combustion of soot deposits from diesel engines (60)143

Metal/zeolite

Comments on induction periods for synthesis of hydrocarbons from syngas over metal/zeolite catalysts using a two stage process (43)193

Metal-support effect

Metal-support effects in copper catalysts for the liquid phase hydrolysis of acrylonitrile (60)173

Methacrylic acid esterification

Kinetics of the esterification of methacrylic acid with ethylene oxide in the presence of ferric chloride immobilized on polymer support (53)41

Methanation

Semiconductivity study of ceria-supported nickel related to its methanation catalytic activity (53)117

Silica supported rhodium-ruthenium bimetallic catalysts in carbon monoxide hydrogenation. I. Influence of the method of preparation and methanation behaviour (42)229

Methanation catalyst

Valency and adsorption characteristics of a sulphided $\text{MoO}_3/\gamma\text{-Al}_2\text{O}_3$ methanation catalyst (55)11

Methane

Methane to higher hydrocarbons — review (47)173

Carbon dioxide hydrogenation on potassium-promoted nickel catalysts (50)189

Methane chlorination

Methane to higher hydrocarbons — review (47)173

Methane conversion

Role of carbon tetrachloride in the conversion of methane on silica-supported alkali metal added alkaline earth oxide catalysts (58)83

Oxidative conversion of methane and C_2 hydrocarbons on oxides: Homogeneous versus heterogeneous processes (47)283

Oxidative coupling of methane over cobalt-magnesium and manganese-magnesium mixed oxide catalysts (60)13

Oxidative coupling of methane over calcium manganate and gadolinium manganate perovskites promoted with sodium pyrophosphate (60)119

Methane coupling

Oxidative coupling of methane over chloride catalysts (56)219

Origin of the low limits in the higher hydrocarbon yields in the oxidative coupling reaction of methane (56)L29

Selective oxidative coupling of methane over supported alkaline earth metal halide catalysts (50)223

Effect of additives on lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (56)119

Methane dimerization

Oxidative dimerization of methane on lead oxide-alumina catalysts (45)209

Effects of carbon dioxide and catalyst preparation on the oxidative dimerization of methane (59)213

Catalytic properties of lithium carbonate melts and related slurries for the oxidative dimerization of methane (56)149

Methane oxidation

Comparative study of catalysts for the oxidative coupling of methane (43)105

Silica supported molybdena catalysts. Characterization and methane oxidation (44)117

Methanol formation at high pressure by the catalyzed oxidation of natural gas and by the sensitized oxidation of methane (57)45

Selective oxidation of methane over Vycor glass, quartz glass and various silica, magnesia and alumina surfaces (44)33

Methane oxidative coupling

Oxidative coupling of methane over LnLiO_2 compounds ($\text{Ln} = \text{Sm}, \text{Nd}, \text{La}$) (51)L1

Methane oxidative coupling over titanate catalysts (53)183

Oxidative coupling of methane over thallium based silica supported catalysts (54)241

Oxypyrolysis of natural gas (58)269

Oxidative coupling of methane over Ba/CaO catalysts. A comparison with Li/MgO (59)291

Oxidative coupling of methane over $\text{Y}_2\text{O}_3\text{-CaO}$ catalysts (59)59

Selective oxidative coupling of methane to ethylene with molten oxides containing alkali metal chloride (47)303

Kinetics and mechanism of oxidative coupling of methane over lanthanum-boron oxide (47)273

Kinetic and mechanistic aspects of the oxidative coupling of methane over a Li/MgO catalyst (52)131

Oxidative coupling of methane over lithium-doped ultrafine crystalline magnesium oxide (47)295

Lithium chemistry of lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (58)131

High selectivity catalysts for the oxidative coupling of methane. Complex oxides with the rock salt structure (42)L1

Oxidative coupling of methane over alkali-doped antimony oxide (53)71

Methane oxychlorination

Effects of the support and the addition of a second promoter on potassium chloride-copper(II) chloride catalysts used in the oxychlorination of methane (46)251

Methane sulphidation

Methane to higher hydrocarbons — review (47)173

Methane synthesis

Investigation of Kölbel-Engelhardt synthesis over iron-based catalysts (47)205

Carbon monoxide hydrogenation over metal loaded aluminophosphates (47)225

Supported metal cluster compounds as precursors of Fischer-Tropsch catalysts (47)239

Application of Co-Mn₂O₃-Ru catalyst to the process for producing high-calorie substitute natural gas from coke oven gas (47)193

Methanol

Methyl formate as a new building block in C₁ chemistry — a review (57)1

Temperature-programmed desorption studies on Pd/CeO₂ after methanol and formic acid adsorption and carbon monoxide-hydrogen reaction (50)43

Methanol conversion

Methanol conversion on aluminophosphates with zeolite structure (42)1

Selective transformation of methanol into light olefins on metallic catalysts (42)299

Coke deposits on H-ZSM-5 zeolite (54)289

Preparation of silico-alumino-phosphates by the rapid crystallization method and their catalytic performance in the conversion of methanol to light olefins (58)155

Effect of the temperature regime of methanol conversion to hydrocarbons on coking of zeolite catalysts and their regeneration (43)85

Conversion of methanol on ultrastable faujasitic catalysts. Selective formation of hexamethylbenzene (42)195

Conversion of methanol to hydrocarbons over silica-alumina. Selective formation of lower olefins (54)139

Methanol conversion to hydrocarbons using modified clinoptilolite catalysts: Investigation of catalyst lifetime and reactivation (43)133

Acid-leached dealuminated mordenite: effect of acid concentration on catalyst life in methanol conversion (53)169

Deactivation resistance of ZSM-5 type zeolites containing alkaline earth metals used for methanol conversion (41)121

Methanol conversion to hydrocarbons. Primary versus secondary formation of methane and ethene (42)29

HZSM-5 pelletized and modified with α -Ca₃(PO₄)₂ and HPO₄²⁻ as a catalyst for methanol conversion (49)143

Effect of crystallization time on the physicochemical and catalytic properties of a ZSM-5 type zeolite (42)35

DTA apparatus as a catalytic microreactor with on-line analysis of the products (51)181

Methanol and dimethyl ether conversion to hydrocarbons using tungsten trioxide/alumina as catalyst. A study of catalyst reactivation (41)253

Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts (57)31

Methanol dehydrogenation

Efficient dehydrogenation of methanol using hydride-forming alloys (Zr₂Ni, R₂Co₇ and RFe₂) as hydrogen acceptors (58)165

Chemical and structural changes of Na₂MoO₄ as a methanol dehydrogenation catalyst (57)83

Novel type of catalyst for the pure dehydrogenation of methanol to formaldehyde (59)L1

Characterization of supported copper catalysts for methanol dehydrogenation prepared from silica hydrogel (45)335

Methanol-hydrocarbon cracking

Coupled conversion of methanol and C₄ hydrocarbons to lower olefins (50)149

Methanol oxidation

Exhaust-catalyst development for methanol-fueled vehicles. III. Formaldehyde oxidation (44)73

Methanol reforming

Copper catalysts for the steam reforming of methanol. Analysis of the preparation variables (45)53

Methanol synthesis

Effect of carbon dioxide on methanol synthesis over different catalysts (49)83

Methanol formation at high pressure by the catalyzed oxidation of natural gas and by the sensitized oxidation of methane (57)45

Supported copper catalysts prepared from copper(II) formate. Hydrogenation of carbon dioxide containing feedstocks (48)365

Characterization and catalytic activity of copper/alumina methanol synthesis catalysts (44)165

Support and additive effects in the synthesis of methanol over copper catalysts (45)131

Novel methanol synthesis catalysts derived from intermetallic precursors: CO₂ poisoning and molecular mechanism of the synthesis reaction (50)157

Support and morphological effects in the synthesis of methanol over Cu/ZnO, Cu/ZrO₂ and Cu/SiO₂ catalysts (43)141

Methanol synthesis on Cu/ZnAl₂O₄ and Cu/ZnO-Al₂O₃ catalysts: Influence of carbon monoxide pretreatment on the formation and concentration of formate species (59)165

Methanol synthesis from hydrogen, carbon monoxide, and carbon dioxide over a CuO/ZnO/Al₂O₃ catalyst. I. Steady-state kinetics experiments (50)247

Methanol synthesis from hydrogen, carbon monoxide and carbon dioxide over a CuO/ZnO/Al₂O₃ catalyst. II. Development of a phenomenological rate expression (50)265

In situ study of catalysts. Application in methanol synthesis and ethylene epoxidation (43)311

Copper surface area and acidity in CO/H₂ of Cu/ZnO/Al₂O₃ methanol synthesis catalysts (60)73

Methanol synthesis on monovalent copper species stabilized on silica and zinc oxide (51)141

Preparation of monovalent copper by a single electron transfer step in the photoreduction of zinc oxide-supported copper catalysts (41)147

Double promotion of palladium/silica catalysts by iron and magnesium oxide in synthesis of methanol from carbon monoxide and hydrogen (45)71

Structure and activity in CO/H₂ of Cu/ZnO/Al₂O₃ methanol synthesis catalysts (60)61

Methanol synthesis catalysts derived from ternary rare earth, copper, zirconium and rare earth, copper, titanium intermetallic alloys (58)69

Methanol synthesis catalysts

Automated testing of methanol synthesis catalysts (43)301

Methanol-to-gasoline

Chemical modification of H-ZSM-5 by adsorption of rhodium and phosphorus complexes (50)131

Methanol-hydrocarbon cracking

Coupled conversion of methanol and C₄-hydrocarbons (CMHC) on iron-containing ZSM-5 type zeolites (57)203

Methyl formate

Methyl formate as a new building block in C₁ chemistry - a review (57)1

Methylene blue adsorption

Characterization of hydro-cracking catalysts by acidity measurements (47)45

Methylnaphthalene

Effect of sulphur on the coking of rhodium in the steam reforming of 1-methylnaphthalene (53)95

Methylpentane conversion

Limitation of n-hexane and 3-methylpentane conversion over zeolite ZSM-5 by intracrystalline diffusion (59)311

Methylpentane cracking

Effect of pretreatment conditions on hydrocarbon reactions on alumina-supported molybdenum catalysts (46)57

Methylpentane isomerization

Effect of pretreatment conditions on hydrocarbon reactions on alumina-supported molybdenum catalysts (46)57

Methyltetrahydrofuran

Hydrogenolysis of methyltetrahydrofuran on platinum. II. Effects of self-poisoning and evaluation of structure sensitivity (44)239

Microreactor

High selectivity catalysts for the oxidative coupling of methane. Complex oxides with the rock salt structure (42)L1

Minilith

Performance of the Minilith — A shaped hydrodemetallation catalyst (42)47

Mixed oxides

Study of copper-zinc oxide catalysts, characterisation of the coprecipitate and mixed oxide (55)165

Model compounds

Catalytic hydroprocessing of simulated coal tars. I. Activity of a sulphided Ni-Mo/Al₂O₃ catalyst for the hydroconversion of model compounds (54)91

Catalytic hydroprocessing of simulated coal tars. II. Effect of acid catalysts on the hydroconversion of model compounds on a sulphided Ni-Mo/Al₂O₃ catalyst (54)101

Molecular sieve

The very large pore molecular sieve VPI-5: an aluminophosphate-hydrate! (56)L21

Synthesis and characterization of the very large pore molecular sieve MCM-9 (51)L13

Comments on "diffusion of alkanes in molecular sieves: Evidence for confinement effects" (52)165

Molten oxides

Selective oxidative coupling of methane to ethylene with molten oxides containing alkali metal chloride (47)303

Molybdena/silica

Silica supported molybdena catalysts. Characterization and methane oxidation (44)117

Molybdena-alumina

Studies of molybdena-alumina catalysts. XV. Effect of fluorine-modified alumina on catalyst properties (49)247

Molybdena-alumina interaction chemistry: Effect of preadsorbed sulphate and fluoride anions on the dispersion of molybdenum (55)215

Studies of molybdena-alumina catalysts. XVII. sulfided catalysts exposed to air (58)199

Molybdenum

Hydrodesulphurization activity and characterization of sulphided molybdenum and cobalt-molybdenum catalysts. Comparison of alumina-, silica-alumina- and titania-supported catalysts (52)211

Nitric oxide chemisorption and temperature-programmed desorption study of cobalt and molybdenum catalysts supported on activated carbon and alumina (42)307

Transient response studies of C₄ hydrocarbon oxidation over MnMoO₄/MoO₃ catalysts (58)305

Existence of synergy between "CoMoS" and Co₉S₈: New proof of remote control in hydrodesulfurization (50)L7

Molybdenum/AlPO₄

Carbon monoxide hydrogenation over metal loaded aluminophosphates (47)225

Molybdenum/alumina

Effect of pretreatment conditions on hydrocarbon reactions on alumina-supported molybdenum catalysts (46)57

Synergy in hydrodesulfurization and hydrogenation on mechanical mixtures of cobalt sulfide on carbon and MoS₂ on alumina (51)L21

Molybdenum oxide/silica

Ethylene homologation reaction in the presence of metathesis on MoO_x/SiO₂ catalyst: Selectively promoted by adding copper (50)15

Molybdenum oxide/tin oxide

Titration of active sites for partial oxidation of methanol over V₂O₅/SnO₂ and MoO₃/SnO₂ catalysts by a low-temperature oxygen chemisorption technique (55)L1

Molybdenum/silica

Sulphide catalysts on silica as a support. VII. Isotope exchange of hydrogen sulphide with sulphided catalysts (45)183

Molybdenum sulphide/alumina

Hydrodenitrogenation of simple aromatic amines on molybdena catalysts (46)241

Molybdenum sulphide-iron

Model hydrodesulfurization catalysts: solid state synthesis and characterization of iron containing molybdenum sulphide (56)281

Molybdovanadophosphoric acids

Selective oxidation of n-pentane on 12-molybdovanadophosphoric acids (46)197

Monolayer structure

Hydrosulfurization activity of WO_3/γ -alumina prepared by the equilibrium adsorption method (59)185

Monoliths

Fibrillar alumina as a wash-coat on monoliths in the catalytic oxidation of xylene (55)123

Mordenite

Cyclization of citronellal to isopulegol by zeolite catalysis (47)363

Acid-leached dealuminated mordenite: effect of acid concentration on catalyst life in methanol conversion (53)169

Deactivation of H-mordenite and $\text{ZrO}_2/\text{SO}_2^{4-}$ during n-butane isomerization (46)103

Chemical vapour deposition method for fine-control of the pore-opening size of Na-mordenite (44)95

Isomerization of *o*-dichlorobenzene over H-mordenite. Effect of the silicon-to-aluminium ratio (51)285

Mössbauer spectroscopy

Iron sulphide containing hydrosulphurization catalysts. Mössbauer study of the sulphidability of α -iron(III) oxide (42)153

Double promotion of palladium/silica catalysts by iron and magnesium oxide in synthesis of methanol from carbon monoxide and hydrogen (45)71

Motor Fuels

Synthesis of motor fuels from HY-zeolite supported Fischer-Tropsch iron catalysts (55)47

Multilayer structure

Hydrosulfurization activity of WO_3/γ -alumina prepared by the equilibrium adsorption method (59)185

N

Naphtha reforming

Hydrocarbon reforming on Pt-Re-S/ Al_2O_3 -Cl coked in a commercial reactor (52)249

Influence of the reduction temperature on the characteristics of the metallic phase of Pt-Ge/ Al_2O_3 catalysts (60)47

Natural gas

Oxypyrolysis of natural gas (58)269

Nickel

Kinetic and mechanistic studies of nickel-catalysed olefin oligomerization (48)1

Design and study of catalysts for selective hydrogenation (53)63

Structure of Raney nickel catalysts modified by chromium hydroxide deposition (56)57

Kinetic model of nitrobenzene hydrogenation to aniline over industrial copper catalyst considering the effects of mass transfer and deactivation (59)31

Effect of pore diffusion on the triacylglycerol distribution of partially hydrogenated trioleylglycerol (43)339

Nickel/alumina

Potassium promotion of Ni/ Al_2O_3 catalysts (54)159

Adsorption of group VIII metal cyanide complexes on acid-modified γ -alumina. Preparation of new supported metallic catalysts (49)255

Effects of alumina dissolution and metal ion buffering on the dispersion of alumina supported nickel and ruthenium catalysts (55)137

Nickel-based heterogeneous catalysts for olefin oligomerization. I. Support and anion effects (42)205

Effect of thermal treatment on the reducibility of alumina-supported nickel catalysts (51)223

Characterization of nickel catalysts by chemisorption techniques, X-ray diffraction and magnetic measurements. Effects of support, precursor and hydrogen pretreatment (46)281

Nickel/ceria

Semiconductivity study of ceria-supported nickel related to its methanation catalytic activity (53)117

Influence of the support on the catalytic properties of nickel/ceria in carbon monoxide and benzene hydrogenation (46)269

Nickel-exchanged zeolite Y

Oligomerization of ethene over nickel-exchanged zeolite Y into a diesel-range product (42)325

Nickel-hydride intermediate

Kinetic and mechanistic studies of nickel-catalysed olefin oligomerization (48)1

Nickel/kieselguhr

Selective hydrogenation of neat isoquinoline. I. Activities of some commercial catalysts and effects of coexisting sulphur-containing compounds in the substrate (41)99

Nickel/molybdenum/alumina

Effect of fluorine on hydrogenation of cyclohexene on sulfided Ni (or Co)-Mo/Al₂O₃ catalysts (57)223

Effect of thermal treatment on the sintering and structural changes of cobalt-molybdenum/alumina and nickel-molybdenum/alumina hydrotreating catalysts (41)109

Nickel oxide

Use of catalytic detector in temperature-programmed reduction (58)147

Nickel oxide/silica

Characterization of coprecipitated nickel catalysts: Comparison of NiO/SiO₂ and NiO/TiO₂ catalysts (47)155

Nickel oxide/titania

Characterization of coprecipitated nickel catalysts: Comparison of NiO/SiO₂ and NiO/TiO₂ catalysts (47)155

Nickel oxide-thorium oxide/alumina

Characterization and deactivation of NiO-ThO₂ catalysts (48)159

Nickel oxide-tungsten oxide/alumina

Temperature-programmed reduction of NiO-WO₃/Al₂O₃ hydrosulphurization catalysts (46)11

Nickel/rare earth oxides

Isotopic exchange measurements of the rate of interconversion of carbon monoxide and carbon dioxide over nickel supported on rare earth oxides (58)255

Nickel/silica

Carbon dioxide hydrogenation on potassium-promoted nickel catalysts (50)189

Catalytic storage of hydrogen: Hydrogenation of toluene over a nickel/silica aerogel catalyst in integral flow conditions (42)121

Nickel-based heterogeneous catalysts for olefin oligomerization. I. Support and anion effects (42)205

Characterization of the standard nickel/silica catalyst EuroNi-1. II. Chemical aspects: precipitation, reduction and chemical analysis (54)65

Characterization of the standard nickel/silica catalyst EuroNi-1. I. Background, aims, organization and outline (54)59

Comparative study of the activity of titania and silica-based catalysts for carbon dioxide methanation (41)241

Support and alkali promotion effects on the surface chemistry of nickel/silica catalysts (44)105

Effect of the preparation on the activity and selectivity of supported nickel catalysts (51)1

Characterization of nickel catalysts by chemisorption techniques, X-ray diffraction and magnetic measurements. Effects of support, precursor and hydrogen pretreatment (46)281

Preparation of uniformly dispersed nickel/silica catalysts from synthetic nickel-chrysotile (53)15

Study by analytical electron microscopy of the potassium distribution on silica-supported nickel and palladium catalysts (47)353

Nickel/silica-alumina

Nickel-based heterogeneous catalysts for olefin oligomerization. I. Support and anion effects (42)205

Large pore nickel/silica-alumina catalysts for hydrogenation of synthetic distillates. Effects of composition and structure (41)177

Carbon dioxide hydrogenation on potassium-promoted nickel catalysts (50)189

Effect of the preparation on the activity and selectivity of supported nickel catalysts (51)1

Nickel/titania

Comparative study of the activity of titania and silica-based catalysts for carbon dioxide methanation (41)241

Production of higher alcohols from synthesis gas over nickel containing catalysts. Effects of adding copper and sodium to coprecipitated NiO-TiO₂ catalysts (42)143

Characterization of nickel catalysts by chemisorption techniques, X-ray diffraction and magnetic measurements. Effects of support, precursor and hydrogen pretreatment (46)281

Nickel-chromium

Unique bimetallic nickel-chromium and nickel-molybdenum catalysts for hydrogenation in the liquid phase (53)217

Nickel-chrysotile

Preparation of uniformly dispersed nickel/silica catalysts from synthetic nickel-chrysotile (53)15

Nickel-molybdenum

Unique bimetallic nickel-chromium and nickel-molybdenum catalysts for hydrogenation in the liquid phase (53)217

Nickel-molybdenum sulphides

Catalytic hydroprocessing of simulated coal tars. I. Activity of a sulphided Ni-Mo/Al₂O₃ catalyst for the hydroconversion of model compounds (54)91

Catalytic hydroprocessing of simulated coal tars. II. Effect of acid catalysts on the hydroconversion of model compounds on a sulphided Ni-Mo/Al₂O₃ catalyst (54)101

Nickel-alumina

Studies on the promotion of nickel-alumina coprecipitated catalysts. III. Cerium oxide (45)281

Studies on the promotion of nickel-alumina coprecipitated catalysts. II. Lanthanum oxide (45)257

Studies on the promotion of nickel-alumina coprecipitated catalysts. I. Titanium oxide (45)239

Nickel-chromium

New approach to skeletal nickel catalysts. Catalytic properties of the nickel-chromium system (42)285

Nickel-copper/titania

Production of higher alcohols from synthesis gas over nickel containing catalysts. Effects of adding copper and sodium to coprecipitated NiO-TiO₂ catalysts (42)143

Nickel-molybdenum

Progress in the catalysis of the upgrading of petroleum residue: A review of 25 years of R & D on Shell's residue hydroconversion technology (47)1

Hydrodenitrogenation using ternary metal catalyst on mixed zeolite- γ -alumina supports (47)331

Nickel-molybdenum/alumina

Effect of nickel on the surface acidity of γ -alumina and alumina-supported nickel-molybdenum hydrotreating catalysts (50)237

Study of low-percentage alumina-supported nickel-molybdenum catalysts by ESR spectroscopy and magnetic measurements (48)177

¹³C-NMR characterization of organic residues on spent hydroprocessing, hydrocracking and demetallization catalysts (55)81

Effect of oxygen concentration on temperature runaway during regeneration of hydrotreating catalyst (44)189

Effect of phosphorus on the surface state of alumina-supported nickel-molybdenum catalysts for hydrodesulphurization (56)163

Nickel-molybdenum-silica

Sulphide catalysts on silica as a support. VII. Isotope exchange of hydrogen sulphide with sulphided catalysts (45)183

Niobia

Study of supported iridium catalysts by hydrogen-oxygen titrations. Influence of the support (58)175

Nitric oxide reduction

Nitric oxide reduction performance of automotive palladium catalysts (48)93

Novel type of carbon-supported catalysts. II. Activity measurements (49)319

Vanadia supported on titania-silica: Physical characterization and activity for the selective reduction on nitric oxide (51)67

Structure and selectivity changes in vanadia-titania catalysts used to promote the reduction of nitric oxide with ammonia (52)225

Effects of drying on the preparation of HF co-impregnated rhodium/Al₂O₃ catalysts (55)287

Nitrobenzene hydrogenation

Kinetic model of nitrobenzene hydrogenation to aniline over industrial copper catalyst considering the effects of mass transfer and deactivation (59)31

Nitrodiphenylamine

Heterogeneous catalytic transfer hydrogenation reactions of 4-nitrodiphenylamine (59)1

Nitrogen-containing compounds

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts. I: Influence of nitrogen-containing compounds (49)219

Nitrogen oxides removal

Influence of phosphorus in vanadium-containing catalysts for NO_x removal (55)151

Nitrous oxide decomposition

Investigation of the dispersion of supported copper catalysts by oxygen adsorption and nitrous oxide decomposition (43)91

Characterization of copper/alumina catalysts prepared by deposition-precipitation using urea hydrolysis. I. Nitrous oxide decomposition and reaction of ethanol (45)103

Surface and sub-surface oxidation of copper and supported copper catalysts by nitrous oxide (46)161

Noble metal catalysts

Periodic operation effects in propane and propylene oxidation over noble metal catalysts (49)195

Nuclear magnetic resonance

About coke deposition on zeolite HY. A ^{129}Xe -NMR study (43)15

^{13}C -NMR characterization of organic residues on spent hydroprocessing, hydrocracking and demetallization catalysts (55)81

O

Octane enhancement

Octane enhancement in fluid catalytic cracking. II. Operation in the overcracking regime (58)19

Octane enhancement in fluid catalytic cracking. I. Role of ZSM-5 addition and reactor temperature (58)1

Oligomerization

Effect of silicon-to-aluminium ratio and synthesis time on high-pressure olefin oligomerization over ZSM-5 (56)263

Nickel-based heterogeneous catalysts for olefin oligomerization. I. Support and anion effects (42)205

Effect of silicon-to-aluminium ratio and synthesis time on high-pressure olefin oligomerization over ZSM-5 (56)263

Oligomerization of ethene over nickel-exchanged zeolite Y into a diesel-range product (42)325

Conversion of propene into gasoline and middle distillate using alkali ZSM-5 zeolite catalysts (45)11

On-line analysis

DTA apparatus as a catalytic microreactor with on-line analysis of the products (51)181

Organic residues

^{13}C -NMR characterization of organic residues on spent hydroprocessing, hydrocracking and demetallization catalysts (55)81

Osmium/alumina

Temperature-programmed decomposition as a probe for the surface reactivity of heterogeneous catalysts. Model system $\text{Os}_3(\text{CO})_{12}$ supported on silica and alumina (46)145

Osmium/silica

Temperature-programmed decomposition as a probe for the surface reactivity of heterogeneous catalysts. Model system $\text{Os}_3(\text{CO})_{12}$ supported on silica and alumina (46)145

Overcracking regime

Octane enhancement in fluid catalytic cracking. II. Operation in the overcracking regime (58)19

Oxidation

Catalysis with permselective inorganic membranes — a review (49)1

Oxidation-reduction treatments

Chemisorptive and catalytic properties of rhodium mixed oxide (RhNbO_4) catalyst during oxidation-reduction treatments. A high activity for ethane hydrogenolysis (53)111

Oxidative adsorption

Adsorption and oxidative adsorption of sulfur dioxide on γ -alumina (55)193

Oxidative conversion

Oxidative conversion of methane and C_2 hydrocarbons on oxides: Homogeneous versus heterogeneous processes (47)283

Oxidative coupling

Oxidative coupling of methane over LnLiO_2 compounds ($\text{Ln} = \text{Sm}, \text{Nd}, \text{La}$) (51)11

Methane oxidative coupling over titanate catalysts (53)183

Oxidative coupling of methane over alkali-doped antimony oxide (53)71

Oxidative coupling of methane over thallium based silica supported catalysts (54)241

Oxidative coupling of methane over chloride catalysts (56)219

Oxidative coupling of methane over Ba/CaO catalysts. A comparison with Li/MgO (59)291

Selective oxidative coupling of methane to ethylene with molten oxides containing alkali metal chloride (47)303

Origin of the low limits in the higher hydrocarbon yields in the oxidative coupling reaction of methane (56)L29

Selective oxidative coupling of methane over supported alkaline earth metal halide catalysts (50)223

Kinetics and mechanism of oxidative coupling of methane over lanthanum-boron oxide (47)273

Kinetic and mechanistic aspects of the oxidative coupling of methane over a Li/MgO catalyst (52)131

Oxidative coupling of methane over lithium-doped ultrafine crystalline magnesium oxide (47)295

Reaction path of the oxidative coupling of methane over a lithium-doped magnesium oxide catalyst. Factors effecting the rate of total oxidation of ethane and ethylene (52)147

High selectivity catalysts for the oxidative coupling of methane. Complex oxides with the rock salt structure (42)L1

Role of chlorine in improving selectivity in the oxidative coupling of methane to ethylene (46)69

Oxidative dimerization

Effects of carbon dioxide and catalyst preparation on the oxidative dimerization of methane (59)213

Catalytic properties of lithium carbonate melts and related slurries for the oxidative dimerization of methane (56)149

Oxidative methylation

Oxidative methylation of toluene with methane over alkali metal bromide loaded rare earth oxides (53)L19

Oxide electrode

Solid electrolyte potentiometry at an oxide electrode (49)L1

Oxidizing agents

Methane to higher hydrocarbons — review (47)173

Oxygen

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts II: Influence of various compounds containing phosphorus, oxygen, sulphur and chloride on the catalytic performance of platinum catalyst (49)235

Oxygen adsorption

Investigation of the dispersion of supported copper catalysts by oxygen adsorption and nitrous oxide decomposition (43)91

Oxygen isotope exchange

The role of tin in supported rhodium-tin bimetallic catalysts (47)25

Oxygen spillover

Transient response studies of C₄ hydrocarbon oxidation over MnMoO₄/MoO₃ catalysts (58)305

Oxygenate synthesis

C₂ oxygenate synthesis from CO hydrogenation on AgRh/SiO₂ (57)241

Oxypyrolysis

Oxypyrolysis of natural gas (58)269

P

Palladium

Catalysis with permselective inorganic membranes — a review (49)1

Heterogeneous catalytic transfer hydrogenation reactions of 4-nitrophenylamine (59)1

Oxidative redispersion of palladium and formation of PdO particles in NaY. An application of high precision TPR (54)189

Periodic operation effects in propane and propylene oxidation over noble metal catalysts (49)195

Complete catalytic oxidation of benzene over supported vanadium oxides modified by palladium (49)125

An unusual form of non-Arrhenius behaviour in ethyne hydrogenation over palladium catalysts (55)L5

Gas-phase acetoxylation of 1,3-butadiene over palladium catalysts. V. X-ray photoelectron spectroscopic study of Pd-Sb-V-CsCl-KOAc catalyst (50)119

Reduction of acetophenone with palladium catalysts by hydrogen transfer and with molecular hydrogen (43)41

Palladium/alumina

Nitric oxide reduction performance of automotive palladium catalysts (48)93

Effect of carbon dioxide on methanol synthesis over different catalysts (49)83

Adsorption studies of different reagents on supported palladium catalysts (60)1

Distributions of HF co-impregnated rhodium, platinum and palladium in alumina honeycomb supports (55)271

Activity and selectivity of Pd/ α -Al₂O₃ for ethyne hydrogenation in a large excess of ethene and hydrogen (58)227

Effect of dispersion of supported palladium on its electronic and catalytic properties in the hydrogenation of vinylacetylene (42)131

Palladium/carbon

Selective hydrogenation of neat isoquinoline. I. Activities of some commercial catalysts and effects of coexisting sulphur-containing compounds in the substrate (41)99

Effect of Pd/C dispersion on its catalytic properties in acetylene and vinylacetylene hydrogenation (54)277

Palladium/ceria

Temperature-programmed desorption studies on Pd/CeO₂ after methanol and formic acid adsorption and carbon monoxide-hydrogen reaction (50)43

Promoting effects of lithium on Pd/CeO₂ catalysts in carbon monoxide-hydrogen reactions: Chemical trapping and temperature-programmed desorption studies (51)165

Palladium oxide

Activity and stability of a copper(II) oxide-zinc(II) oxide catalyst for oxidative dehydrogenation of cyclohexanol to cyclohexanone (41)53

Palladium/silica

Effect of dispersion of supported palladium on its electronic and catalytic properties in the hydrogenation of vinylacetylene (42)131

Study by analytical electron microscopy of the potassium distribution on silica-supported nickel and palladium catalysts (47)353

Double promotion of palladium/silica catalysts by iron and magnesium oxide in synthesis of methanol from carbon monoxide and hydrogen (45)71

Palladium/stannia

Modelling catalyst-support interactions in carbon monoxide oxidation catalysed by Pd/SnO₂ (49)55

Palladium/zinc oxide

Effect of reduction and oxidation treatments on Pd/ZnO catalysts (48)385

Palladium/ZSM-5

Hydrocarbon synthesis over palladium/ZSM-5 bifunctional catalysts (41)65

Palladium-aluminium

Effect of high-temperature reduction on carburization of alumina-supported palladium: evidence for palladium-aluminium alloy formation (54)267

Palladium-cobalt/carbon

Real and apparent dispersion of carbon supported palladium-cobalt catalysts (53)29

Palladium-carbon

Selective hydrodehalogenation of an olefinic compound on doubly poisoned palladium-carbon catalyst: the mechanism of metal ion poisoning (57)71

Palladium-magnesium/silica

Effects of chloride precursors on the palladium valency and surface structures of Pd-Mg²⁺/SiO₂ catalysts for carbon monoxide hydrogenation (57)55

Palladium-magnesium/zeolites

Highly selective dimerization of ethylene over Pd-Mg-X zeolite and determination of its active sites by infrared spectroscopy (52)81

Partial oxidation

Methane to higher hydrocarbons - review (47)173

Antimony oxides: A guide to phase changes during catalyst preparation - a review (48)123

Particle size

Effect of particle size and the reactivity of oxygen-adsorbed platinum supported on alumina (59)141

Passivation

Surface passivation and shape selectivity in xylene isomerization over ZSM-48 (55)265

Pentane cracking

Chemical modification of H-ZSM-5 by adsorption of rhodium and phosphorus complexes (50)131

Pentane oxidation

Selective oxidation of n-pentane on 12-molybdovanadophosphoric acids (46)197

Pentasil

Contrast between H-ZSM-5 and H-Fe-silicates of the pentasil pore structure in propylene conversion (51)155

Pentene isomerization

Stabilized magnesia: a novel catalyst (support) material (54)79

Performance testing

Performance testing with a gas-liquid-solid system in a mechanically stirred reactor: the Fischer-Tropsch synthesis (56)231

Periodic effects

Periodic operation effects in propane and propylene oxidation over noble metal catalysts (49)195

Perovskite

Preparation of supported $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ catalysts by the citrate process (41)137

pH influence

Influence of pH on the preparation of monometallic rhodium and platinum, and bimetallic rhodium-platinum catalysts supported on γ -alumina (46)31

Phase changes

Antimony oxides: A guide to phase changes during catalyst preparation - a review (48)123

Fischer-Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties (52)193

Phenanthrene

Catalytic hydroprocessing of simulated coal tars. I. activity of a sulphided Ni-Mo/ Al_2O_3 catalyst for the hydroconversion of model compounds (54)91

Phenol

Influence of sulphur level on hydrodeoxygenation (52)41

Selective alkylation of phenol to 2,6-xyleneol over vanadia-chromia mixed oxide catalysts (49)165

Phenol alkylation

Synthesis of 2,6-xyleneol by alkylation of phenol with methanol (47)347

Phenol hydrogenation

Adsorption studies of different reagents on supported palladium catalysts (60)1

Phenylenediamines

Heterogeneous catalytic transfer hydrogenation reactions of 4-nitrophenylamine (59)1

Phosphorus-molybdenum/alumina

Effect of phosphorus on molybdenum-based hydrotreating catalysts. I. Characterization of the oxidic state of P-Mo/ Al_2O_3 systems (48)341

Phosphoric acid

Lumped kinetic model for propene-butene mixtures oligomerization on a supported phosphoric acid catalyst (41)301

Phosphoric acid impregnation

Surface changes of alumina induced by phosphoric acid impregnation (56)197

Phosphorus

Adsorption mechanism of phosphorus on alumina (41)261

Hydroxyl groups in phosphorus-modified HZSM-5 (53)299

Influence of phosphorus in vanadium-containing catalysts for NO_x removal (55)151

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts II: Influence of various compounds containing phosphorus, oxygen, sulphur and chloride on the catalytic performance of platinum catalyst (49)235

Oxidative coupling of methane over calcium manganate and gadolinium manganate perovskites promoted with sodium pyrophosphate (60)119

Phosphorus-molybdenum/alumina

Effect of phosphorus on molybdenum-based hydrotreating catalysts. II. Hydrodesulphurization activity and characterization of the sulphided state of P-Mo/ Al_2O_3 systems (48)353

Phosphorus-nickel-molybdenum/alumina

Influence of phosphorus concentration on the type and structure of the compounds formed in the oxide form of phosphorus-nickel-molybdenum/alumina catalysts for hydrodesulphurization (48)295

Photonic activation

Photoassisted deposition of rhodium on platinum/titania samples as a method of preparing bimetallic catalysts (57)191

Picoline ammoxidation

Ammoxidation of picolines on vanadium phosphate catalysts (49)205

Pillared clays

Physical and catalytic properties of smectite clays pillared by alumina in disproportionation of 1,2,4-trimethylbenzene (45)171

Pilot plant

Activity of steam reforming catalysts: Role and assessment (43)283

Pilot plant testing of hydrotreating catalysts: Influence of catalyst condition, bed loading and dilution (43)251

Piperidine

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts. I: Influence of nitrogen-containing compounds (49)219

Platinum

Effect of lead on the activity of platinum catalysts (44)261

Automotive exhaust gas catalysts: Surface structure and activity (48)71

Hydrogenation of 1,3-butadiene on Pt(111). Comparison with results on Pt(110) and Pt(100) (43)177

Activity and selectivity modifications produced by coke deposition on mono- and bimetallic reforming catalysts (53)53

Periodic operation effects in propane and propylene oxidation over noble metal catalysts (49)195

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts II: Influence of various compounds containing phosphorus, oxygen, sulphur and chloride on the catalytic performance of platinum catalyst (49)235

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts. I: Influence of nitrogen-containing compounds (49)219

Combustion of soot deposits from diesel engines on mixed oxides of vanadium pentoxide and cupric oxide (60)157

Platinum/alumina

Effect of steam on the coking of platinum catalysts. II. Kinetics (49)75

Influence of pH on the preparation of monometallic rhodium and platinum, and bimetallic rhodium-platinum catalysts supported on γ -alumina (46)31

Hydrothermal stability of silica as a support for platinum in an oxidation catalyst (44)251

Distributions of HF co-impregnated rhodium, platinum and palladium in alumina honeycomb supports (55)271

Influence of the support towards platinum catalysed 1,3-butadiene hydrogenation (58)241

Interaction between iridium and platinum precursors in the preparation of iridium platinum catalysts (42)61

Evolution during thermal treatment of pure and lanthanum-doped Pt/Al₂O₃ and Pt-Rh/Al₂O₃ automotive exhaust catalysts: Transmission electron microscopy studies on model samples (50)79

Examination of the behaviour of Pt/Al₂O₃ and Pt-Re/Al₂O₃ reforming catalyst in the presence of ZSM-5 zeolite (47)59

Determination of the accessible metallic surface of supported platinum: Quantitative infrared spectroscopic study of carbon monoxide adsorption (59)153

Effect of steam on the coking of platinum catalysts. I. Inhibiting effect of steam at low partial pressure for the dehydrogenation of cyclopentane and the coking reaction (49)67

Effect of particle size and the reactivity of oxygen-adsorbed platinum supported on alumina (59)141

Enantioselective hydrogenation of α -keto esters: Temperature-programmed reduction study of liquid-phase Pt/Al₂O₃ hydrogenation catalysts (52)19

Fibrillar alumina as a wash-coat on monoliths in the catalytic oxidation of xylene (55)123

Platinum/carbon

Selective hydrogenation of neat isoquinoline. I. Activities of some commercial catalysts and effects of coexisting sulphur-containing compounds in the substrate (41)99

Platinum/ceria

Determination of the accessible metallic surface of supported platinum: Quantitative infrared spectroscopic study of carbon monoxide adsorption (59)153

Platinum/magnesia

Influence of the support towards platinum catalysed 1,3-butadiene hydrogenation (58)241

Platinum/niobia

Determination of the accessible metallic surface of supported platinum: Quantitative infrared spectroscopic study of carbon monoxide adsorption (59)153

Platinum/silica

Hydrothermal stability of silica as a support for platinum in an oxidation catalyst (44)251

Characterization of the standard platinum/silica catalyst EUROPT-1. VI. Catalytic properties (41)313

Skeletal reactions of n-hexane over Pt/SiO₂ (EUROPT-1). Mechanism changeover governed by hydrogen (43)L1

Influence of the support towards platinum catalysed 1,3-butadiene hydrogenation (58)241

Hydrogenolysis of methyltetrahydrofuran on platinum. II. Effects of self-poisoning and evaluation of structure sensitivity (44)239

Slow uptake of oxygen and carbon monoxide by platinum/silica (EUROPT-1) and subsequent effects on hydrogenation of benzene and hydrogenolysis of methylcyclopentane (42)337

Platinum/titania

Photoassisted deposition of rhodium on platinum/titania samples as a method of preparing bimetallic catalysts (57)191

Influence of carrier doping on catalytic performance of titanium dioxide supported platinum (46)297

Platinum/zeolite

Aromatization of n-hexane over Pt-KL catalyst (51)L7

Preparation of PtHY catalysts. Influence on the catalytic properties of the complexes used as platinum precursors (45)325

Platinum-palladium-rhodium

Analytical electron microscopy of a vehicle-aged automotive catalyst (53)223

Platinum-chromium/alumina

The state of metallic phase in alumina-supported platinum-chromium catalysts (55)93

Platinum-germanium/alumina

Nature of the metallic phase in platinum-germanium/alumina catalysts (44)23

Influence of the reduction temperature on the characteristics of the metallic phase of Pt-Ge/Al₂O₃ catalysts (60)47

Platinum-iridium/alumina

Interaction between iridium and platinum precursors in the preparation of iridium platinum catalysts (42)61

Platinum-molybdena/silica

Interaction of carbon monoxide with molybdena-promoted platinum/silica: Fourier transform infrared study at room temperature (52)263

Platinum-palladium-rhodium/alumina

Electron microscopy study of a rejuvenated vehicle-aged automotive exhaust catalyst (56)45

Platinum-palladium-rhodium/alumina

Analytical electron microscopy study of two vehicle-aged automotive exhaust catalysts having dissimilar activities (56)23

Platinum-rhenium

Synthesis and characterization of bimetallic clusters prepared by sublimation of Re₂(CO)₁₀ onto Pt/NaY (46)45

Platinum-rhenium/alumina

Hydrocarbon reforming on Pt-Re-S/Al₂O₃-Cl coked in a commercial reactor (52)249

Crystallinity of coke on platinum-rhenium/alumina reforming catalyst during the commercial cycle (51)195

Burning of coke on Pt-Re/Al₂O₃ catalyst: Activation energy and oxygen reaction order (55)1

Effect of chlorine and sulphur on the selectivity of supported platinum-rhenium catalysts in reactions of n-hexane (46)213

Examination of the behaviour of Pt/Al₂O₃ and Pt-Re/Al₂O₃ reforming catalyst in the presence of ZSM-5 zeolite (47)59

Selective regeneration of catalytic functions of Pt-Re-S/Al₂O₃-Cl during coke burning (56)1

Platinum-rhodium/alumina

Effect of hydrothermal treatment on alumina as support for noble metal catalysts (59)89

Platinum-rhodium/alumina

Evolution during thermal treatment of pure and lanthanum-doped Pt/Al₂O₃ and Pt-Rh/Al₂O₃ automotive exhaust catalysts: Transmission electron microscopy studies on model samples (50)79

Platinum-tin/alumina

Platinum-tin/alumina catalyst: Modification of the metallic phase after successive oxidation-reduction cycles (45)61

Platinum-zeolite

Redispersion of Pt-zeolite catalysts with chlorine (56)137

Poisoning

Effect of lead on the activity of platinum catalysts (44)261

Polymer support

Kinetics of the esterification of methacrylic acid with ethylene oxide in the presence of ferric chloride immobilized on polymer support (53)41

Polytetrafluoroethene

PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. I. Preparation and characterization (43)1

PTFE dispersed hydrophobic catalysts for hydrogen-water isotopic exchange. II. Water poisoning (43)15

Pore diffusion

Effect of pore diffusion on the triacylglycerol distribution of partially hydrogenated trioleylglycerol (43)339

Pore radius

Crystallinity of coke on platinum-rhenium/alumina reforming catalyst during the commercial cycle (51)195

Pore size

Synthesis and characterization of the very large pore molecular sieve MCM-9 (51)L13

Chemical vapour deposition method for fine-control of the pore-opening size of Na-mordenite (44)95

Pore structure

Coking and deactivation of zeolites - a review (54)1

Porosity

Control of porosity and surface area in alumina: II. Alcohol and glycol additives (56)187

Control of porosity and surface area in alumina: I. Effect of preparation conditions (56)177

Potassium

Zeolites as base catalysts: Condensation of aldehydes with derivatives of malonic esters (59)237

Potassium ferrite

Activity decay of potassium-promoted iron oxide catalyst for dehydrogenation of ethylbenzene (51)203

Pretreatment

Influence of the pretreatment of cracking catalysts activity and selectivity (47)131

Characterization of nickel catalysts by chemisorption techniques, X-ray diffraction and magnetic measurements. Effects of support, precursor and hydrogen pretreatment (46)281

Pretreatment conditions

Effect of pretreatment conditions on hydrocarbon reactions on alumina-supported molybdenum catalysts (46)57

Probe molecules

Higher alcohols synthesis from CO + 2H₂ on cobalt-copper catalyst. Use of probe molecules and chemical trapping in the study of the reaction mechanism (53)197

Product analysis

DTA apparatus as a catalytic microreactor with on-line analysis of the products (51)181

Propane oxidation

Periodic operation effects in propane and propylene oxidation over noble metal catalysts (49)195

Propanol hydrogenation

Heterogeneous catalytic transfer hydrogenation reactions of 4-nitrophenylamine (59)1

Propene

Coking and regeneration of zeolite catalysts in fixed beds during cumene cracking (58)53

Propene conversion

Contrast between H-ZSM-5 and H-Fe-silicates of the pentasil pore structure in propylene conversion (51)155

Conversion of propene into gasoline and middle distillate using alkalis ZSM-5 zeolite catalysts (45)L1

Propene dehydroaromatization

Investigation of the features of zinc oxide-based catalysts for propylene dehydroaromatization (44)179

Propene oligomerization

Nickel-based heterogeneous catalysts for olefin oligomerization. I. Support and anion effects (42)205

Lumped kinetic model for propene-butene mixtures oligomerization on a supported phosphoric acid catalyst (41)301

Propene oxidation

Activity and sulphur tolerance of monophase spinels in carbon monoxide and C_3H_6 oxidation (47)141

Periodic operation effects in propane and propylene oxidation over noble metal catalysts (49)195

Relationship between the catalytic properties and surface composition of a polycrystalline Fe-Ni ribbon (58)219

Investigation of the effect of water and oxygen on the reaction of propylene with cobalt oxide-magnesium oxide solid solutions. I. Thermodesorption study (50)27

Investigation of the effect of water and oxygen on the reaction of propylene with cobalt oxide-magnesium oxide solid solutions. II. IR spectroscopic study (50)37

Propene synthesis

Determination of framework concentrations of gallium [Ga]-ZSM-5 (54)177

Propionitrile hydrogenation

Real and apparent dispersion of carbon supported palladium-cobalt catalysts (53)29

Propyl amines

Real and apparent dispersion of carbon supported palladium-cobalt catalysts (53)29

Pulse surface reaction rate analysis

Design of a potassium-promoted Rh/ Al_2O_3 catalyst for synthesis of C_2 oxygenates by pulse surface reaction rate analysis (55)225

Pulse-flow reactor

Catalytic effect on hydrogen sulphide generation from a tar sand (53)81

Pyridine

Non-existence of synergism in the hydrodenitrogenation of pyridine over carbon-supported cobalt-molybdenum sulphide catalysts (45)L23

Pyrocatechol

Influence of sulphur level on hydrodeoxygenation (52)41

Q**Quality control**

Quality control in the preparation of zeolite ZSM-5 using a catalytic test reaction (55)259

Quartz glass

Selective oxidation of methane over Vycor glass, quartz glass and various silica, magnesia and alumina surfaces (44)33

Quinoline hydrodenitrogenation

Side reactions in quinoline hydrodenitrogenation (41)81

R**Radioisotopes**

Aromatization of n-hexane over Pt-KL catalyst (51)L7

Radiotracers

Radiotracers in fluorine chemistry. XIII. Catalysis by fluorinated surfaces: The interaction of [^{36}Cl]-chlorine labelled hydrogen chloride and 1,1-dichlorotetrafluoroethane with fluorinated chromia catalysts (52)69

Raney nickel

Structure of Raney nickel catalysts modified by chromium hydroxide deposition (56)57

Heterogeneous catalytic transfer hydrogenation reactions of 4-nitrophenylamine (59)1

Selective hydrogenation of neat isoquinoline. I. Activities of some commercial catalysts and effects of coexisting sulphur-containing compounds in the substrate (41)99

Catalytic hydrogenation on Raney nickel catalyst modified by chromium hydroxide deposition (49)91

Structure and activity of chromium-promoted Raney copper catalysts for carbon monoxide oxidation (44)11

Selective hydrogenation of neat isoquinoline. II. Reaction pathway over Raney nickel (43)71

New approach to skeletal nickel catalysts. Catalytic properties of the nickel-chromium system (42)285

Rare earth

Methanol synthesis catalysts derived from ternary rare earth, copper, zirconium and rare earth, copper, titanium intermetallic alloys (58)69

Rare earth oxides

Isotopic exchange measurements of the rate of interconversion of carbon monoxide and carbon dioxide over nickel supported on rare earth oxides (58)255

Oxidative methylation of toluene with methane over alkali metal bromide loaded rare earth oxides (53)L19

Rate expression

Methanol synthesis from hydrogen, carbon monoxide and carbon dioxide over a CuO/ZnO/Al₂O₃ catalyst. II. Development of a phenomenological rate expression (50)265

Reaction mechanism

Mechanism of hexane cracking in ZSM-5 (60)137

Reaction network

Conversion of ethanol in aqueous solution over ZSM-5 zeolites. Study of the reaction network (58)119

Reactivation

Methanol conversion to hydrocarbons using modified clinoptilolite catalysts: Investigation of catalyst lifetime and reactivation (43)133

Reactor temperature

Octane enhancement in fluid catalytic cracking. I. Role of ZSM-5 addition and reactor temperature (58)1

Realumination

Magic-angle-spinning nuclear magnetic resonance and adsorption studies of dealumination and realumination of zeolite ZSM-5 (56)L15

Redispersion

Redispersion of Pt-zeolite catalysts with chlorine (56)137

Redox cycle

Oxidative dimerization of dimethyl ether with solid catalysts (53)L5

Reducing agents

Methane to higher hydrocarbons — review (47)173

Reforming

Examination of the behaviour of Pt/Al₂O₃ and Pt-Re/Al₂O₃ reforming catalyst in the presence of ZSM-5 zeolite (47)59

Reforming catalysts

Activity and selectivity modifications produced by coke deposition on mono- and bimetallic reforming catalysts (53)53

Crystallinity of coke on platinum-rhenium/alumina reforming catalyst during the commercial cycle (51)195

Morphology and catalytic activity of iron-rhenium bimetallic catalysts supported on silica. I. Temperature-programmed reduction, X-ray photoelectron spectroscopy and Mössbauer study (51)33

Regeneration

Regeneration of spent hydroprocessing catalysts: Metals removal (47)83

Coupled conversion of methanol and C₄ hydrocarbons to lower olefins (50)149

Redispersion of Pt-zeolite catalysts with chlorine (56)137

Base properties of modified γ -alumina (56)253

Progress in the catalysis of the upgrading of petroleum residue a review of 25 years of R & D on Shell's residue hydroconversion technology (47)1

Nickel-based heterogeneous catalysts for olefin oligomerization. I. Support and anion effects (42)205

Oxidative redispersion of palladium and formation of PdO particles in NaY. An application of high precision TPR (54)189

Activation of zeolite- Ω . I. Physicochemical characterization of calcined and self-steamed samples (42)105

Electron microscopy study of a rejuvenated vehicle-aged automotive exhaust catalyst (56)45

Kinetic model of nitrobenzene hydrogenation to aniline over industrial copper catalyst considering the effects of mass transfer and deactivation (59)31

Synthesis of motor fuels from HY-zeolite supported Fischer-Tropsch iron catalysts (55)47

Vapour phase hydrochlorination of acetylene with group VIII and IB metal chloride catalysts (43)33

Effect of Na^+ on sulphation and related reactions over a commercial Claus alumina catalyst (43)167

Effect of the temperature regime of methanol conversion to hydrocarbons on coking of zeolite catalysts and their regeneration (43)85

Coking and regeneration of zeolite catalysts in fixed beds during cumene cracking (58)53

Coking, ageing and regeneration of zeolites. XI. Coke formation and deactivation of Pt-ultrastable zeolite HY and PtH-mordenite catalysts during hydrogenation of benzene (58)189

Deactivation of iron oxide-iron phosphate catalyst in isopropanol dehydration (55)181

Para-selectivity of dialkylbenzenes over modified HZSM-5 by vapour phase deposition of silica (54)257

Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts — a review (57)149

Regeneration of a P-V-O-Zn butane oxidation catalyst using chlorine containing hydrocarbons (51)13

Effect of oxygen concentration on temperature runaway during regeneration of hydrotreating catalyst (44)189

Lithium chemistry of lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (58)131

Burning of coke on Pt-Re/ Al_2O_3 catalyst: Activation energy and oxygen reaction order (55)1

Effect of high-temperature reduction on carburization of alumina-supported palladium: evidence for palladium-aluminium alloy formation (54)267

Selective regeneration of catalytic functions of Pt-Re-S/ Al_2O_3 -Cl during coke burning (56)1

Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. II. Catalytic hydrogenation of benzene to cyclohexene and cyclohexane (58)291

Platinum-tin/alumina catalyst: Modification of the metallic phase after successive oxidation-reduction cycles (45)61

Methanol and dimethyl ether conversion to hydrocarbons using tungsten trioxide/alumina as catalyst. A study of catalyst reactivation (41)253

Rejuvenation

Thiophene hydrodesulphurization on fresh, spent, and treated catalysts (51)295

Rhenium sulphide

Thiophene hydrodesulphurization activity of alumina-, silica- and carbon-supported sulphided Re_2O_7 catalysts (48)241

Rhodium

Automotive exhaust gas catalysts: Surface structure and activity (48)71

Hydrogenation of carbon dioxide and carbon monoxide over supported rhodium catalysts under 10 bar pressure (46)1

Periodic operation effects in propane and propylene oxidation over noble metal catalysts (49)195

Chemical modification of H-ZSM-5 by adsorption of rhodium and phosphorus complexes (50)131

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts II: Influence of various compounds containing phosphorus, oxygen, sulphur and chloride on the catalytic performance of platinum catalyst (49)235

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts. I. Influence of nitrogen-containing compounds (49)219

Cyclohexane hydrogenation on rhodium catalysts in the gas phase. Kinetics of the reaction and origin, mechanism and kinetics of the deactivation process (46)131

Rhodium/alumina

Effect of sulphur on the coking of rhodium in the steam reforming of 1-methylnaphthalene (53)95

Co-impregnation of rhodium into alumina honeycombs with acids and salts (56)107

Influence of pH on the preparation of monometallic rhodium and platinum, and bimetallic rhodium-platinum catalysts supported on γ -alumina (46)31

Design of a potassium-promoted Rh/Al₂O₃ catalyst for synthesis of C₂ oxygenates by pulse surface reaction rate analysis (55)225

Distributions of HF co-impregnated rhodium, platinum and palladium in alumina honeycomb supports (55)271

Effects of drying on the preparation of HF co-impregnated rhodium/Al₂O₃ catalysts (55)287

Rhodium/carbon

Selective hydrogenation of neat isoquinoline. I. Activities of some commercial catalysts and effects of coexisting sulphur-containing compounds in the substrate (41)99

Rhodium/lanthana

Promoting effect of lanthana in the hydrogenation of carbon monoxide over supported rhodium catalysts (42)77

Rhodium/magnesia-alumina

Steam reforming of n-heptane using a Rh/MgAl₂O₄ catalyst (47)75

Rhodium mixed oxide catalyst

Chemisorptive and catalytic properties of rhodium mixed oxide (RhNbO₄) catalyst during oxidation-reduction treatments. A high activity for ethane hydrogenolysis (53)L11

Rhodium-ruthenium/silica

Silica supported rhodium-ruthenium bimetallic catalysts in carbon monoxide hydrogenation. I. Influence of the method of preparation and methanation behaviour (42)229

Rhodium/silica

Thermal decomposition of metal carbonyls on oxide supports containing surface hydrides: A route to highly dispersed metal catalysts with unusual properties (55)235

Promoting effect of lanthana in the hydrogenation of carbon monoxide over supported rhodium catalysts (42)77

Rhodium/silver/silica

C₂ oxygenate synthesis from CO hydrogenation on AgRh/SiO₂ (57)241

Rhodium/titania

Hydrogenolysis of light hydrocarbons on rhodium/titania. Strong metal-support interactions and analysis of kinetic data (41)L1

Rhodium-platinum/alumina

Influence of pH on the preparation of monometallic rhodium and platinum, and bimetallic rhodium-platinum catalysts supported on γ -alumina (46)31

Rhodium-tin/silica

The role of tin in supported rhodium-tin bimetallic catalysts (47)25

Rhodium-zeolite

Selective hydroformylation of ethene and propene catalysed on NaY zeolite-entrapped Rh₆ and bimetallic RhFe clusters and their structural characterization by extended X-ray absorption fine structure and Fourier transform infrared spectroscopy (50)294

Ring contraction

Activity and selectivity modifications produced by coke deposition on mono- and bimetallic reforming catalysts (53)53

Riser cracker

FCC catalyst performance evaluation (43)213

Ruthenium

The selectivity problem in the homogeneous carbonylation and hydrocarbonylation of alcohols and esters — A review (50)99

Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. I. Adsorption of the reduction modifiers, water and ϵ -caprolactam on ruthenium (58)281

Ruthenium/alumina

Ammonia synthesis over ruthenium supported catalysts derived from Ru₃(CO)₁₂ (53)L1

Effects of alumina dissolution and metal ion buffering on the dispersion of alumina supported nickel and ruthenium catalysts (55)137

Hydrogenolysis and isomerization of alkanes on Ru/Al₂O₃ catalysts of varying dispersions (59)103

Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. II. Catalytic hydrogenation of benzene to cyclohexene and cyclohexane (58)291

Influence of the precursor and the support on the catalytic properties of ruthenium for alkane hydrogenolysis (60)33

Ruthenium/carbon

Selective hydrogenation of neat isoquinoline. I. Activities of some commercial catalysts and effects of coexisting sulphur-containing compounds in the substrate (41)99

Calorimetric study of the coadsorption of hydrogen and carbon monoxide over ruthenium graphitized carbon black catalysts (55)21

Ruthenium/magnesia

Influence of the precursor and the support on the catalytic properties of ruthenium for alkane hydrogenolysis (60)33

Ruthenium/titania

Effects of the addition of zeolites on ruthenium catalysts in carbon monoxide hydrogenation (49)45

Influence of the precursor and the support on the catalytic properties of ruthenium for alkane hydrogenolysis (60)33

Ruthenium-palladium

Ruthenium-palladium catalysts: The effect of palladium on the catalytic behaviour of ruthenium (44)1

S

Salts

Co-impregnation of rhodium into alumina honeycombs with acids and salts (56)107

Samarium oxide

Comparative study of catalysts for the oxidative coupling of methane (43)105

Role of chlorine in improving selectivity in the oxidative coupling of methane to ethylene (46)69

Scaling down

FCC catalyst performance evaluation (43)213

Activity of steam reforming catalysts: Role and assessment (43)283

Design of laboratory hydrotreating reactors scaling down of trickle-flow reactors (43)273

Second promoter

Effects of the support and the addition of a second promoter on potassium chloride-copper(II) chloride catalysts used in the oxychlorination of methane (46)251

Segregation

Segregation and chemical state of vanadium and molybdenum in vanadium-molybdenum oxide catalyst studied by X-ray photoelectron spectroscopy (56)207

Selective hydrogenation

Design and study of catalysts for selective hydrogenation (53)63

Selective oxidation

Selective oxidation of n-pentane on 12-molybdovanadophosphoric acids (46)197

Selectivity (*N,N*-dimethyldodecylamine)

Amination catalysts for the production of *N,N*-dimethyldodecylamine from dodecyl alcohol and dimethylamine (52)171

Selectivity (1-pentanol)

Hydrogenolysis of methyltetrahydrofuran on platinum. II. Effects of self-poisoning and evaluation of structure sensitivity (44)239

Selectivity (2-methyl branched alkanes)

Synthesis and shape-selective properties of ZSM-22 (48)137

Selectivity (2,6-xylene)

Synthesis of 2,6-xylene by alkylation of phenol with methanol (47)347

Selectivity (3,5-xylene)

Aromatization of isophorone to 3,5-xylene (48)223

Selectivity (acetals)

Formation and hydrolysis of acetals catalysed by acid faujasites (59)333

Selectivity (acetone)

Conversion of ethanol to acetone over zinc oxide-calcium oxide catalyst. Optimization of catalyst preparation and reaction conditions and deduction of reaction mechanism (52)237

Selectivity (acrolein)

Relationship between the catalytic properties and surface composition of a polycrystalline Fe-Ni ribbon (58)219

Selectivity (acrylamide)

ESCA study of copper catalysts used for the hydration of acrylonitrile to acrylamide (47)339

Selectivity (acrylic acid, methyl acrylate)

Reaction of acetic acid with methanol over vanadium-titanium binary phosphate catalysts in the presence of oxygen (59)227

Selectivity (acrylic acid)

Effect of the composition of vanadium-titanium binary phosphate on catalytic performance in vapor-phase aldol condensation (54)29

Selectivity (acrylonitrile)

Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts — a review (57)149

Selectivity (alcohols)

Synthesis of alcohols from carbon oxides and hydrogen. XVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn-Cr-O systems in the synthesis of alcohols from carbon monoxide and hydrogen (57)253

Effect of preparation parameters on the catalytic nature of potassium promoted Cu-Co-Cr higher alcohol catalysts (44)153

Alcohol synthesis from syngas on group VIII metal catalysts promoted by Mo-Na₂O (49)213

Selectivity (aldehydes and alcohols)

Selective hydroformylation of ethene and propene catalysed on NaY zeolite-entrapped Rh₆ and bimetallic RhFe clusters and their structural characterization by extended X-ray absorption fine structure and Fourier transform infrared spectroscopy (50)294

Selectivity (alkenes)

Chemical vapour deposition method for fine-control of the pore-opening size of Na-mordenite (44)95

Calorimetric study of the coadsorption of hydrogen and carbon monoxide over ruthenium graphitized carbon black catalysts (55)21

Selectivity (ammonia)

Hydrodenitrogenation of simple aromatic amines on molybdena catalysts (46)241

Selectivity (aniline)

Kinetic model of nitrobenzene hydrogenation to aniline over industrial copper catalyst considering the effects of mass transfer and deactivation (59)31

Selectivity (aromatics)

Conversion of light alkanes to aromatic hydrocarbons. II. Role of gallium species in propane transformation on GaHZSM5 catalysts (43)155

Calculated equilibria for the alkene and alcohol aromatization processes (54)37

Aromatization of n-hexane over galloaluminosilicate and gallosilicate (55)115

Factors affecting the selectivity of the aromatization of light alkanes on modified ZSM-5 catalysts (41)89

Activity decay of potassium-promoted iron oxide catalyst for dehydrogenation of ethylbenzene (51)203

Dehydrocyclodimerization of 1,3-butadiene catalyzed by magnesium oxide and zirconium oxide (47)17

Selectivity (asphaltenes)

Coal liquefaction using an intermetallic hydride to distribute hydrogen and catalyze the reaction (44)53

Selectivity (benzene)

Oxidative dehydrogenation of cyclohexene over cobalt-exchanged Y-zeolites (50)55

Structural recognition and preorganization in zeolite catalysis: Direct aromatization of n-hexane on zeolite L-based catalysts (45)L15

Investigation of the features of zinc oxide-based catalysts for propylene dehydroaromatization (44)179

Supported iridium catalysts. Comparison between resistance to sulphur poisoning and hydrodesulphurization properties (57)99

Selectivity (benzoic acid, benzaldehyde)

Effect of water on the catalytic oxidation of toluene over vanadium oxide catalysts (53)251

Selectivity (benzonitrile)

Ammonoxidation of toluene over coke-covered alumina (59)129

Selectivity (BTX)

Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane steam-cracker (52)1

Selectivity (butadiene)

Transformation of ethanol into 1,3-butadiene over magnesium oxide/silica catalysts (43)117

Effect of antimony(IV) oxide, bismuth phosphate and tin(IV) oxide on the catalytic properties of compound oxide catalysts in the oxidative dehydrogenation of n-butene (47)113

Effect of added Sb_2O_4 , BiPO_4 or SnO_2 on the catalytic properties of ZnFe_2O_4 in the oxidative dehydrogenation of butene to butadiene (51)235

Selectivity (butenes)

Influence of the support towards platinum catalysed 1,3-butadiene hydrogenation (58)241

Surface acidity, catalytic activity and selectivity of some oxides supported on alumina (41)1

Hydrogenation of 1,3-butadiene on Pt(111). Comparison with results on Pt(110) and Pt(100) (43)177

Selectivity (C_2 + and alkenes)

Morphology and catalytic activity of FeRe bimetallic catalysts supported on silica. II. Catalytic activity in the carbon monoxide-hydrogen reaction (51)49

Selectivity (C_2 + hydrocarbons)

Oxidative coupling of methane over Y_2O_3 -CaO catalysts (59)59

Selective oxidative coupling of methane over supported alkaline earth metal halide catalysts (50)223

Selectivity (C_2 hydrocarbons)

Oxidative coupling of methane over alkali-doped antimony oxide (53)71

Oxidative coupling of methane over Ba/CaO catalysts. A comparison with Li/MgO (59)291

Effects of carbon dioxide and catalyst preparation on the oxidative dimerization of methane (59)213

Oxidative coupling of methane over lithium-doped ultrafine crystalline magnesium oxide (47)295

Oxidative coupling of methane over cobalt-magnesium and manganese-magnesium mixed oxide catalysts (60)13

Catalytic properties of lithium carbonate melts and related slurries for the oxidative dimerization of methane (56)149

Effect of additives on lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (56)119

High selectivity catalysts for the oxidative coupling of methane. Complex oxides with the rock salt structure (42)L1

Oxidative coupling of methane over calcium manganate and gadolinium manganate perovskites promoted with sodium pyrophosphate (60)119

Selectivity (C_2 oxygenates)

C_2 oxygenate synthesis from CO hydrogenation on AgRh/SiO₂ (57)241

Synthesis of C_2 -oxygenates from syngas over cobalt catalysts promoted by ruthenium and alkaline earths (48)149

Design of a potassium-promoted Rh/ Al_2O_3 catalyst for synthesis of C_2 oxygenates by pulse surface reaction rate analysis (55)225

Selectivity (C_2 - C_4 alkenes)

Effects of the addition of zeolites on ruthenium catalysts in carbon monoxide hydrogenation (49)45

Selectivity (C_3 - C_5 alkenes)

Effect of silicon-to-aluminum ratio and template on the cracking of C_6 - C_8 alkenes over ZSM-5 zeolite (60)87

Selectivity (C_4 -hydrocarbons)

Characterization and deactivation of NiO-ThO₂ catalysts (48)159

Effect of phosphorus on the surface state of alumina-supported nickel-molybdenum catalysts for hydrodesulphurization (56)163

Selectivity (carbonyl group)

Catalytic hydrogenation on Raney nickel catalyst modified by chromium hydroxide deposition (49)91

Selectivity (changes)

Activity and selectivity modifications produced by coke deposition on mono- and bimetallic reforming catalysts (53)53

Selectivity (*cis*-2-hexene)

Reaction selectivity as a test for catalysis on exposed metal (48)235

Selectivity (*cis*- and *trans*-dimethylhexane)

Reaction selectivity as a test for catalysis on exposed metal (48)235

Selectivity (*cis*-decalin)

Shape selectivity in Y-zeolites. Catalytic cracking of decalin-isomers in fixed bed micro reactors (58)105

Selectivity (cresol, xylene)

Selective alkylation of phenol to 2,6-xylene over vanadia-chromia mixed oxide catalysts (49)165

Selectivity (cyclic amines)

Synthesis of cyclic amines and their alkyl derivatives from amine alcohols over supported copper catalysts (53)107

Selectivity (cyclohexane)

Effect of the preparation on the activity and selectivity of supported nickel catalysts (51)1

Selectivity (cyclohexanone)

Adsorption studies of different reagents on supported palladium catalysts (60)1

Selective dehydrogenation of cyclohexanol to cyclohexanone on Cu-ZnO-Al₂O₃ catalysts (45)L11

Selectivity (cyclohexene)

Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. II. Catalytic hydrogenation of benzene to cyclohexene and cyclohexane (58)291

Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. I. Adsorption of the reduction modifiers, water and ϵ -caprolactam on ruthenium (58)281

Selectivity (decahydroisoquinolines)

Selective hydrogenation of neat isoquinoline. II. Reaction pathway over Raney nickel (43)71

Selectivity (diacetone alcohol)

Addition of metal cations to magnesium oxide catalyst for the aldol condensation of acetone (48)63

Selectivity (distillate fuels)

Effect of silicon-to-aluminum ratio and synthesis time on high-pressure olefin oligomerization over ZSM-5 (56)263

Selectivity (divinyl, butenes)

Effect of dispersion of supported palladium on its electronic and catalytic properties in the hydrogenation of vinylacetylene (42)131

Selectivity (epoxide formation)

Support and crystallite size effects in ethylene oxidation catalysis (50)171

Selectivity (ethane, ethene)

Oxidative coupling of methane over thallium based silica supported catalysts (54)241

Selectivity (ethane, ethene)

Lithium chemistry of lithium doped magnesium oxide catalysts used in the oxidative coupling of methane (58)131

Selectivity (ethene)

Comparative study of catalysts for the oxidative coupling of methane (43)105

The bioethanol-to-ethylene (B.E.T.E.) process (48)265

Oxidative coupling of methane over chloride catalysts (56)219

Ethanol conversion over ion-exchanged ZSM-5 zeolites (59)13

Selective oxidative coupling of methane to ethylene with molten oxides containing alkali metal chloride (47)303

Activity and selectivity of Pd/ α -Al₂O₃ for ethyne hydrogenation in a large excess of ethene and hydrogen (58)227

Conversion of ethanol in aqueous solution over ZSM-5 zeolites. Study of the reaction network (58)119

Role of chlorine in improving selectivity in the oxidative coupling of methane to ethylene (46)69

Selectivity (ethene, alkenes)

Oxypropylene of natural gas (58)269

Selectivity (ethene and ethane)

Reaction path of the oxidative coupling of methane over a lithium-doped magnesium oxide catalyst. Factors effecting the rate of total oxidation of ethane and ethylene (52)147

Selectivity (ethyl benzene)

Alkylation of benzene using an aqueous solution of ethanol (53)157

Selectivity (ethylene oxide)

Comparative study of nitrous oxide and oxygen as oxidants for the conversion of ethylene to ethylene oxide over silver (48)37

Selectivity (fatty acids)

Effect of pore diffusion on the triacylglycerol distribution of partially hydrogenated trioleylglycerol (43)339

Selectivity (formaldehyde)

Silica supported molybdena catalysts. Characterization and methane oxidation (44)117

Novel type of catalyst for the pure dehydrogenation of methanol to formaldehyde (59)L1

Selectivity (furan)

Selectivities and intermediates in the oxidation of butene on vanadium oxides on titania (49)273

Selectivity (gas oil)

Hydrosulfurization activity of WO_3/γ -alumina prepared by the equilibrium adsorption method (59)185

Selectivity (gasoline, diesel, olefins)

Catalytic cracking of gasoil: Benefits in activity and selectivity of small Y zeolite crystallites stabilized by a higher silicon-to-aluminium ratio by synthesis (55)65

Selectivity (gasoline, high octane-)

Effect of acidity of HZSM-5 type zeolite on conversion of alkenes and alkanes to gasoline and aromatics (59)75

Selectivity (gasoline)

Octane enhancement in fluid catalytic cracking. II. Operation in the overcracking regime (58)19

Octane enhancement in fluid catalytic cracking. I. Role of ZSM-5 addition and reactor temperature (58)1

Synthesis of motor fuels from HY-zeolite supported Fischer-Tropsch iron catalysts (55)47

Role of zeolite non-framework aluminium in catalytic cracking (45)307

Effects of acid strength of fluid cracking catalysts on resid cracking operation (50)1

Contrast between H-ZSM-5 and H-Fe-silicates of the pentasil pore structure in propylene conversion (51)155

Conversion of propene into gasoline and middle distillate using alkalis ZSM-5 zeolite catalysts (45)L1

Low-temperature hydrocarbon conversion over rare-earth-exchanged zeolite X catalyst (42)169

Selectivity (hexamethylbenzene)

Conversion of methanol on ultrastable faujasitic catalysts. Selective formation of hexamethylbenzene (42)195

Selectivity (hexane)

Skeletal reactions of n-hexane over Pt/SiO_2 (EUROPT-1). Mechanism changeover governed by hydrogen (43)L1

Selectivity (hexane isomerization-cyclization)

Effect of chlorine and sulphur on the selectivity of supported platinum-rhenium catalysts in reactions of n-hexane (46)213

Selectivity (high-octane number hydrocarbons)

Examination of the behaviour of Pt/Al_2O_3 and $Pt-Re/Al_2O_3$ reforming catalyst in the presence of ZSM-5 zeolite (47)59

Selectivity (higher alcohols)

Production of higher alcohols from synthesis gas over nickel containing catalysts. Effects of adding copper and sodium to coprecipitated $NiO-TiO_2$ catalysts (42)143

Synthesis of higher alcohols over copper/cobalt catalysts. Influence of preparative procedures on the activity and selectivity of $Cu/Co/Zn/Al$ mixed oxide catalysts (53)279

Selectivity (higher hydrocarbons)

Origin of the low limits in the higher hydrocarbon yields in the oxidative coupling reaction of methane (56)L29

Selectivity (hydrocarbons, lower-)

Catalytic hydroprocessing of simulated coal tars. II. Effect of acid catalysts on the hydroconversion of model compounds on a sulphided $Ni-Mo/Al_2O_3$ catalyst (54)101

Selectivity (hydrocarbons)

Hydrocarbon synthesis over palladium/ZSM-5 bifunctional catalysts (41)65

Influence of the pretreatment of cracking catalysts activity and selectivity (47)131

Methane to higher hydrocarbons — review (47)173

Methane oxidative coupling over titanate catalysts (53)183

Carbon-supported, (alkali metal) $(\text{Fe}_2\text{Mn}(\text{CO})_{12})$ -derived catalysts. Adsorption properties and catalytic behavior in carbon monoxide hydrogenation (51)93

Fischer-Tropsch synthesis with iron catalysts impact of alkali or added alcohol upon catalytic activity and product selectivity (56)95

Influence of the level of dealumination on the selective adsorption of olefins and paraffins and its implication on hydrogen transfer reactions during catalytic cracking on USY zeolites (47)123

Chemical modification of H-ZSM-5 by adsorption of rhodium and phosphorus complexes (50)131

Catalytic activity and product distribution in the cracking of n-hexane over heteropoly oxometalates and ZSM-5 zeolite (47)95

Product distributions of the Fischer-Tropsch synthesis on precipitated iron catalysts (52)93

Fischer-Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties (52)193

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts. I: Influence of nitrogen-containing compounds (49)219

Relationship between the catalytic properties and surface composition of a polycrystalline Fe-Ni ribbon (58)219

Selectivity (isomerization-cracking)

Effect of pretreatment conditions on hydrocarbon reactions on alumina-supported molybdenum catalysts (46)57

Selectivity (isopropylbenzenes)

Alkylation of benzene with 2-chloropropane on chlorine-treated alumina (56)73

Selectivity (isopulegol)

Cyclization of citronellal to isopulegol by zeolite catalysis (47)363

Selectivity (light alcohols)

Thermal decomposition of metal carbonyls on oxide supports containing surface hydrides: A route to highly dispersed metal catalysts with unusual properties (55)235

Selectivity (light alkenes)

Selective transformation of methanol into light olefins on metallic catalysts (42)299

Preparation of silico-alumino-phosphates by the rapid crystallization method and their catalytic performance in the conversion of methanol to light olefins (58)155

Isotopic exchange measurements of the rate of inter-conversion of carbon monoxide and carbon dioxide over nickel supported on rare earth oxides (58)255

Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts (57)31

Coupled conversion of methanol and C_4 hydrocarbons to lower olefins (50)149

Coupled conversion of methanol and C_4 -hydrocarbons (CMHC) on iron-containing ZSM-5 type zeolites (57)203

Selectivity (maleic anhydride)

Selective oxidation of n-pentane on 12-molybdovanadophosphoric acids (46)197

Nature of the active sites of $(\text{VO})_2\text{P}_2\text{O}_7$ in the selective oxidation of n-butane. Evidence from doping experiments (48)13

Effect of support material on the catalytic performance of $\text{V}_2\text{O}_5/\text{P}_2\text{O}_5$ catalysts for the selective oxidation of but-1-ene and furan to maleic anhydride and its consecutive nonselective oxidation. I. Results of catalytic testing (45)1

Effect of water vapor on the activity and selectivity characteristics of a vanadium phosphate catalyst towards butane oxidation (41)225

Selectivity (metal removal)

Performance of the Minilith — A shaped hydrodemetallation catalyst (42)47

Selectivity (methane, ethene)

Methanol conversion to hydrocarbons. Primary versus secondary formation of methane and ethene (42)29

Selectivity (methane)

Investigation of Kölbel-Engelhardt synthesis over iron-based catalysts (47)205

Carbon monoxide hydrogenation over metal loaded aluminophosphates (47)225

Carbon dioxide hydrogenation on potassium-promoted nickel catalysts (50)189

Hydrogenation of carbon dioxide and carbon monoxide over supported rhodium catalysts under 10 bar pressure (46)1

Supported metal cluster compounds as precursors of Fischer-Tropsch catalysts (47)239

Semiconductivity study of ceria-supported nickel related to its methanation catalytic activity (53)117

Application of Co-Mn₂O₃-Ru catalyst to the process for producing high-calorie substitute natural gas from coke oven gas (47)193

Selectivity (methanol)

Methanol formation at high pressure by the catalyzed oxidation of natural gas and by the sensitized oxidation of methane (57)45

Methanol synthesis on Cu/ZnAl₂O₄ and Cu/ZnO-Al₂O₃ catalysts: Influence of carbon monoxide pretreatment on the formation and concentration of formate species (59)165

Methanol synthesis from hydrogen, carbon monoxide, and carbon dioxide over a CuO/ZnO/Al₂O₃ catalyst. I. Steady-state kinetics experiments (50)247

Copper surface area and acidity in CO/H₂ of Cu/ZnO/Al₂O₃ methanol synthesis catalysts (60)73

Effects of chloride precursors on the palladium valency and surface structures of Pd-Mg²⁺/SiO₂ catalysts for carbon monoxide hydrogenation (57)55

Methanol synthesis on monovalent copper species stabilized on silica and zinc oxide (51)141

Double promotion of palladium/silica catalysts by iron and magnesium oxide in synthesis of methanol from carbon monoxide and hydrogen (45)71

Structure and activity in CO/H₂ of Cu/ZnO/Al₂O₃ methanol synthesis catalysts (60)61

Selectivity (methyl isobutyl ketone)

Design and study of catalysts for selective hydrogenation (53)63

Selectivity (methylcyclohexane)

Catalytic storage of hydrogen: Hydrogenation of toluene over a nickel/silica aerogel catalyst in integral flow conditions (42)121

Selectivity (mid-distillate)

New catalyst for hydrocracking of vacuum residue (51)213

Selectivity (n-butenes)

Highly selective dimerization of ethylene over Pd-Mg-X zeolite and determination of its active sites by infrared spectroscopy (52)81

Selectivity (nitriles)

Amoxidation of picolines on vanadium phosphate catalysts (49)205

Selectivity (nitrogen)

Nitric oxide reduction performance of automotive palladium catalysts (48)93

Structure and selectivity changes in vanadia-titania catalysts used to promote the reduction of nitric oxide with ammonia (52)225

Selectivity (olefins, lower-)

Conversion of methanol to hydrocarbons over silica-alumina. Selective formation of lower olefins (54)139

Selectivity (other)

Side reactions in quinoline hydrodenitrogenation (41)81

Support participation in chemistry of ethylene oxidation on silver catalyst (44)223

Effects of sintering on the active site distribution on promoted catalysts (45)115

Catalysis with permselective inorganic membranes — a review (49)1

The selectivity problem in the homogeneous carbonylation and hydrocarbonylation of alcohols and esters — A review (50)99

New approach to skeletal nickel catalysts. Catalytic properties of the nickel-chromium system (42)285

Selectivity (oxygenates)

Promoting effect of lanthana in the hydrogenation of carbon monoxide over supported rhodium catalysts (42)77

Selectivity (para-aromatics)

Effects of pH during preparation on the physicochemical, acidity and catalytic properties and coking tendencies of HZSM-5-type catalysts (49)27

Selectivity (para-aryl ketones)

Design of synthetic zeolites as catalysts in organic reactions: Acylation of anisole by acyl chlorides or carboxylic acids over acid zeolites (49)109

Selectivity (*para*-dialkylbenzene)

Selective alkylation of alkylbenzenes in the presence of HZSM-5 zeolites (49)101

Selectivity (*para*-)

Para-selectivity of dialkylbenzenes over modified HZSM-5 by vapour phase deposition of silica (54)257

Selectivity (phenol and cresols)

Catalytic hydrodealkylation of tar acids (45)39

Selectivity (phenol)

Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium-silicate zeolites (57)L1

Selectivity (phenylethanol)

Unique bimetallic nickel-chromium and nickel-molybdenum catalysts for hydrogenation in the liquid phase (53)217

Selectivity (pinene, carene)

Catalytic hydrodesulphurization of terpenes (50)87

Selectivity (propene oligomerization)

Nickel-based heterogeneous catalysts for olefin oligomerization. I. Support and anion effects (42)205

Selectivity (shape-)

Shape selectivity of zeolite EU-1 in reactions of aromatic hydrocarbons (49)307

Framework and extra-framework aluminium distribution in $(\text{NH}_4)_2\text{FeSi}$ -dealuminated Y zeolites. Relevance to cracking catalysts (50)287

Surface passivation and shape selectivity in xylene isomerization over ZSM-48 (55)265

Mechanism of hexane cracking in ZSM-5 (60)137

Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization (57)167

Shape selectivity in Y-zeolites. Catalytic cracking of decalin-isomers in fixed bed micro reactors (58)105

Selectivity (styrene)

Expert systems approach to computer-aided design of catalysts (48)107

Selectivity (tetrahydroisoquinoline)

Selective hydrogenation of neat isoquinoline. I. Activities of some commercial catalysts and effects of coexisting sulphur-containing compounds in the substrate (41)99

Selectivity (tetramethylbenzene)

Physical and catalytic properties of smectite clays pillared by alumina in disproportionation of 1,2,4-trimethylbenzene (45)171

Selectivity (theoretical)

Catalytic reaction selectivity in unsteady states (53)89

Selectivity (unsaturated alcohols)

Selective hydrogenation of α,β -unsaturated aldehydes on cobalt-silica catalysts obtained from cobalt chrysotile (56)9

Selectivity (unsaturated bicyclic ketones)

Selective hydrodehalogenation of an olefinic compound on doubly poisoned palladium-carbon catalyst: the mechanism of metal ion poisoning (57)71

Selectivity (*p*-xylene)

Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization (57)167

Selectivity (xylenes)

Shape selectivity of zeolite EU-1 in reactions of aromatic hydrocarbons (49)307

Self-poisoning

Hydrogenolysis of methyltetrahydrofuran on platinum. II. Effects of self-poisoning and evaluation of structure sensitivity (44)239

Semiconductor

Oxypyrolysis of natural gas (58)269

Sepiolite

Reduction of acetophenone with palladium catalysts by hydrogen transfer and with molecular hydrogen (43)41

Shape-selective hydroisomerisation

Hydroisomerization of branched-chain olefins over Pt/H-ZSM-5 zeolite (47)67

Shape-selective properties

Synthesis and shape-selective properties of ZSM-22 (48)137

Shaped catalysts

Upflow versus downflow testing of hydrotreating catalysts (43)237

Silica

Thermal stability of alkali metals deposited on oxide supports and their influence on the surface area of the support (42)217

Silica/alumina

Surface acidity, catalytic activity and selectivity of some oxides supported on alumina (41)1

Conversion of methanol to hydrocarbons over silica-alumina. Selective formation of lower olefins (54)139

Study of supported iridium catalysts by hydrogen-oxygen titrations. Influence of the support (58)175

Deactivation of silica-alumina catalyst during the cumene cracking reaction (52)115

Silica hydrogel

Characterization of supported copper catalysts for methanol dehydrogenation prepared from silica hydrogel (45)335

Silico-alumino-phosphates

Preparation of silico-alumino-phosphates by the rapid crystallization method and their catalytic performance in the conversion of methanol to light olefins (58)155

¹²⁹Xe-NMR investigation of SAPO-37 (54)L1

Silicon-to-aluminium ratio

Isomerization of o-dichlorobenzene over H-mordenite. Effect of the silicon-to-aluminium ratio (51)285

Effect of silicon-to-aluminum ratio and template on the cracking of C₆-C₈ alkenes over ZSM-5 zeolite (60)87

Effect of silicon-to-aluminium ratio and synthesis time on high-pressure olefin oligomerization over ZSM-5 (56)263

Silver

Support participation in chemistry of ethylene oxidation on silver catalyst (44)223

Support and crystallite size effects in ethylene oxidation catalysis (50)171

Ethylene oxide oxidation over a supported silver catalyst. II: Kinetics of inhibited oxidation (41)39

Comparative study of nitrous oxide and oxygen as oxidants for the conversion of ethylene to ethylene oxide over silver (48)37

Ethylene oxide oxidation over a supported silver catalyst. I. Kinetics of uninhibited oxidation (41)23

Silver/alumina

Preparation and characterization of thermostable silver on α -alumina catalysts (44)133

Silver crystallites

Effect of pretreatment on the adsorption properties of silver crystallites (42)255

Sintering

Effects of sintering on the active site distribution on promoted catalysts (45)115

Sulfidation of carbon-supported iron oxide catalysts (51)263

Stability of passivated Raney copper catalysts during reduction before use (54)53

Stabilized magnesia: a novel catalyst (support) material (54)79

Oxidative redispersion of palladium and formation of PdO particles in NaY. An application of high precision TPR (54)189

Characterization of the standard nickel/silica catalyst EuroNi-1. I. Background, aims, organization and outline (54)59

Hydrothermal stability of silica as a support for platinum in an oxidation catalyst (44)251

Effect of calcination atmosphere on CuO/ γ -Al₂O₃ catalyst for carbon monoxide oxidation (52)157

Thermal stability of Co-Mo/Al₂O₃ hydrodesulphurization catalyst (52)181

Electron microscopy study of a rejuvenated vehicle-aged automotive exhaust catalyst (56)45

Analytical electron microscopy study of two vehicle-aged automotive exhaust catalysts having dissimilar activities (56)23

The state of metallic phase in alumina-supported platinum-chromium catalysts (55)93

Effect of hydrothermal treatment on alumina as support for noble metal catalysts (59)89

Effect of thermal treatment on the sintering and structural changes of cobalt-molybdenum/alumina and nickel-molybdenum/alumina hydrotreating catalysts (41)109

Thermal decomposition of metal carbonyls on oxide supports containing surface hydrides: A route to highly dispersed metal catalysts with unusual properties (55)235

Thermal stability of alkali metals deposited on oxide supports and their influence on the surface area of the support (42)217

Zirconia as a support for catalysts. Evolution of the texture and structure on calcination in air (57)127

Effect of high-temperature reduction on carburization of alumina-supported palladium: evidence for palladium-aluminium alloy formation (54)267

Structure and selectivity changes in vanadia-titania catalysts used to promote the reduction of nitric oxide with ammonia (52)225

Effect of dispersion of supported palladium on its electronic and catalytic properties in the hydrogenation of vinylacetylene (42)131

Evolution during thermal treatment of pure and lanthanum-doped $\text{Pt}/\text{Al}_2\text{O}_3$ and $\text{Pt}-\text{Rh}/\text{Al}_2\text{O}_3$ automotive exhaust catalysts: Transmission electron microscopy studies on model samples (50)79

Slow uptake of oxygen and carbon monoxide by platinum/silica (EUROPT-1) and subsequent effects on hydrogenation of benzene and hydrogenolysis of methylcyclopentane (42)337

Fibrillar alumina as a wash-coat on monoliths in the catalytic oxidation of xylene (55)123

Skeletal reactions

Skeletal reactions of n-hexane over Pt/SiO_2 (EUROPT-1). Mechanism changeover governed by hydrogen (43)L1

Slurry reactor

Influence of reaction conditions of the effect of co-feeding ethene in the Fischer-Tropsch synthesis on a fused-iron catalyst in the liquid phase (53)1

Smectite clays

Physical and catalytic properties of smectite clays pillared by alumina in disproportionation of 1,2,4-trimethylbenzene (45)171

Sodium

Zeolites as base catalysts: Condensation of aldehydes with derivatives of malonic esters (59)237

Oxidative coupling of methane over calcium manganate and gadolinium manganate perovskites promoted with sodium pyrophosphate (60)119

Sodium carbonate

Chemical and structural changes of Na_2MoO_4 as a methanol dehydrogenation catalyst (57)83

Sodium modifier

Effect of Na^+ on sulphation and related reactions over a commercial Claus alumina catalyst (43)167

Sodium molybdate

Chemical and structural changes of Na_2MoO_4 as a methanol dehydrogenation catalyst (57)83

Sodium oxide doping

Effect of sodium oxide-doping on surface and catalytic properties of $\text{CuO}/\text{Al}_2\text{O}_3$ solids (52)33

Sodium-lithium aluminate

Novel type of catalyst for the pure dehydrogenation of methanol to formaldehyde (59)L1

Solid acid

Preparation of silico-alumino-phosphates by the rapid crystallization method and their catalytic performance in the conversion of methanol to light olefins (58)155

Solid base

Dehydrocyclodimerization of 1,3-butadiene catalyzed by magnesium oxide and zirconium oxide (47)L7

Solid electrolyte potentiometry

Solid electrolyte potentiometry at an oxide electrode (49)L1

Solid superacid

Solid catalyst treated with anion: XIX. Synthesis of the solid superacid catalyst of tin oxide treated with sulfate ion (59)205

Solid catalyst treated with anion: XVIII. Benzoylation of toluene with benzoyl chloride and benzoic anhydride catalysed by solid superacid of sulfate-supported alumina (59)197

Solvent effects

Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects (57)215

Spillover

Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane steam-cracker (52)1

Stabilized magnesia

Stabilized magnesia: a novel catalyst (support) material (54)79

Steam

Effect of steam on the coking of platinum catalysts. II. Kinetics (49)75

Effect of steam on the coking of platinum catalysts. I. Inhibiting effect of steam at low partial pressure for the dehydrogenation of cyclopentane and the coking reaction (49)67

Steam cracking

Preparation and evaluation of catalysts for the production of ethylene via steam cracking. Effect of operating conditions on the performance of $12\text{CaO}/7\text{Al}_2\text{O}_3$ catalyst (54)119

Steam reforming

Activity of steam reforming catalysts: Role and assessment (43)283

Steam reforming of n-heptane using a $\text{Rh}/\text{MgAl}_2\text{O}_4$ catalyst (47)75

Effect of sulphur on the coking of rhodium in the steam reforming of 1-methylnaphthalene (53)95

Copper catalysts for the steam reforming of methanol. Analysis of the preparation variables (45)53

Steric effects

Influence of sulphur level on hydrodeoxygenation (52)41

Catalytic hydrogenolysis of heteroatom-substituted benzenes (52)57

Strong metal-support interaction

Influence of carrier doping on catalytic performance of titanium dioxide supported platinum (46)297

Studies on the promotion of nickel-alumina coprecipitated catalysts. I. Titanium oxide (45)239

Hydrogenolysis of light hydrocarbons on rhodium/titania. Strong metal-support interactions and analysis of kinetic data (41)L1

Strontium

Oxypropylolysis of natural gas (58)269

Structural recognition

Structural recognition and preorganization in zeolite catalysis: Direct aromatization of n-hexane on zeolite L-based catalysts (45)L15

Structure

Large pore nickel/silica-alumina catalysts for hydrogenation of synthetic distillates. Effects of composition and structure (41)177

Structure sensitivity

Hydrogenolysis of methyltetrahydrofuran on platinum. II. Effects of self-poisoning and evaluation of structure sensitivity (44)239

Styrene

Base properties of modified γ -alumina (56)253

Styrene-divinylbenzene

Catalytic activity of sulphonated styrene-divinylbenzene resins (48)307

Substitute natural gas

Application of $\text{Co-Mn}_2\text{O}_3$ -Ru catalyst to the process for producing high-calorie substitute natural gas from coke oven gas (47)193

Sulphate

Molybdena-alumina interaction chemistry: Effect of preadsorbed sulphate and fluorine anions on the dispersion of molybdenum (55)215

Sulphidation

Sulfidation of carbon-supported iron oxide catalysts (51)263

Sulphide catalysts

Sulphide catalysts on silica as a support. VIII. Peculiarities of thiophene hydrogenolysis and probable nature of "synergetic effect" (45)191

Sulphide catalysts on silica as a support. VII. Isotope exchange of hydrogen sulphide with sulphided catalysts (45)183

Sulphiding agents

Influence of the nature of the activating molecules on the catalytic activity of cobalt-molybdenum/alumina catalysts (46)113

Sulphonic acids

Ammonia-hydrazine conversion processes. XVI. Conversion of benzophenone azine into hydrazine catalyzed by sulphonic acids in a two-phase system (41)213

Sulphur

Effect of sulphur on the coking of rhodium in the steam reforming of 1-methylnaphthalene (53)95

Additive effects in the selective hydrogenation of unsaturated hydrocarbons on platinum and rhodium catalysts II: Influence of various compounds containing phosphorus, oxygen, sulphur and chloride on the catalytic performance of platinum catalyst (49)235

Effect of chlorine and sulphur on the selectivity of supported platinum-rhenium catalysts in reactions of n-hexane (46)213

Sulphur dioxide

Adsorption and oxidative adsorption of sulfur dioxide on γ -alumina (55)193

Sulphur poisoning

Supported iridium catalysts. Comparison between resistance to sulphur poisoning and hydrodesulphurization properties (57)99

Sulphur poisoning of Fischer-Tropsch synthesis catalysts in a fixed-bed reactor (47)249

Sulphur tolerance

Activity and sulphur tolerance of monophase spinels in carbon monoxide and C_8H_8 oxidation (47)141

Support effect

Support participation in chemistry of ethylene oxidation on silver catalyst (44)223

Support and crystallite size effects in ethylene oxidation catalysis (50)171

Surface area

Effect of pretreatment on the adsorption properties of silver crystallites (42)255

Control of porosity and surface area in alumina: II. Alcohol and glycol additives (56)187

Control of porosity and surface area in alumina: I. Effect of preparation conditions (56)177

Effect of sodium oxide-doping on surface and catalytic properties of CuO/Al_2O_3 solids (52)33

Thermal stability of alkali metals deposited on oxide supports and their influence on the surface area of the support (42)217

Copper surface area and acidity in CO/H_2 of $Cu/ZnO/Al_2O_3$ methanol synthesis catalysts (60)73

Determination of the accessible metallic surface of supported platinum: Quantitative infrared spectroscopic study of carbon monoxide adsorption (59)153

Surface properties

Effects of pretreatment on the surface properties of iron Fischer-Tropsch catalysts (48)199

Surface reactivity

Temperature-programmed decomposition as a probe for the surface reactivity of heterogeneous catalysts. Model system $Os_3(CO)_{12}$ supported on silica and alumina (46)145

Surfactants

Inorganic salt catalysis in the process for the conversion of alcohols/alkylphenols into ethoxychloride surfactant intermediates (46)313

Synergism

Sulphide catalysts on silica as a support. VIII. Peculiarities of thiophene hydrogenolysis and probable nature of "synergetic effect" (45)191

Non-existence of synergism in the hydrodenitrogenation of pyridine over carbon-supported cobalt-molybdenum sulphide catalysts (45)L23

Effect of antimony(IV) oxide, bismuth phosphate and tin(IV) oxide on the catalytic properties of compound oxide catalysts in the oxidative dehydrogenation of n-butene (47)113

Synergy in hydrodesulfurization and hydrogenation on mechanical mixtures of cobalt sulfide on carbon and MoS_2 on alumina (51)L21

Existence of synergy between $CoMoS$ and Co_9S_8 : New proof of remote control in hydrodesulfurization (50)L7

Syngas conversion

Production of higher alcohols from synthesis gas over nickel containing catalysts. Effects of adding copper and sodium to coprecipitated $NiO-TiO_2$ catalysts (42)143

Activity of steam reforming catalysts: Role and assessment (43)283

Effect of carbon dioxide on methanol synthesis over different catalysts (49)83

Potassium promotion of Ni/Al_2O_3 catalysts (54)159

Stability of passivated Raney copper catalysts during reduction before use (54)53

Methyl formate as a new building block in C_1 chemistry — a review (57)1

C_2 oxygenate synthesis from CO hydrogenation on AgRh/SiO₂ (57)241

New iron/nickel alloy catalyst for Fischer-Tropsch synthesis (57)L5

Synthesis of C_2 -oxygenates from syngas over cobalt catalysts promoted by ruthenium and alkaline earths (48)149

Design of a potassium-promoted Rh/Al₂O₃ catalyst for synthesis of C_2 oxygenates by pulse surface reaction rate analysis (55)225

Support and additive effects in the synthesis of methanol over copper catalysts (45)131

Higher alcohol synthesis over alkali metal-promoted high-temperature methanol catalysts (47)313

Synthesis of alcohols from carbon oxides and hydrogen. XVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn-Cr-O systems in the synthesis of alcohols from carbon monoxide and hydrogen (57)253

Support and morphological effects in the synthesis of methanol over Cu/ZnO, Cu/ZrO₂ and Cu/SiO₂ catalysts (43)141

Methanol synthesis on Cu/ZnAl₂O₄ and Cu/ZnO-Al₂O₃ catalysts: Influence of carbon monoxide pretreatment on the formation and concentration of formate species (59)165

Effect of preparation parameters on the catalytic nature of potassium promoted Cu-Co-Cr higher alcohol catalysts (44)153

Methanol synthesis from hydrogen, carbon monoxide, and carbon dioxide over a CuO/ZnO/Al₂O₃ catalyst. I. Steady-state kinetics experiments (50)247

Methanol synthesis from hydrogen, carbon monoxide and carbon dioxide over a CuO/ZnO/Al₂O₃ catalyst. II. Development of a phenomenological rate expression (50)265

Influence of reaction conditions of the effect of co-feeding ethene in the Fischer-Tropsch synthesis on a fused-iron catalyst in the liquid phase (53)1

Temperature-programmed desorption studies on Pd/CeO₂ after methanol and formic acid adsorption and carbon monoxide-hydrogen reaction (50)43

Interaction of carbon monoxide with molybdena-promoted platinum/silica: Fourier transform infrared study at room temperature (52)263

Thermal decomposition of metal carbonyls on oxide supports containing surface hydrides: A route to highly dispersed metal catalysts with unusual properties (55)235

Product distributions of the Fischer-Tropsch synthesis on precipitated iron catalysts (52)93

Fischer-Tropsch synthesis on supported iron catalysts prepared from iron(III) chloride. Pretreatment effects on phase changes and catalytic properties (52)193

Comments on induction periods for synthesis of hydrocarbons from syngas over metal/zeolite catalysts using a two stage process (43)193

Copper surface area and acidity in CO/H₂ of Cu/ZnO/Al₂O₃ methanol synthesis catalysts (60)73

Alcohol synthesis from syngas on group VIII metal catalysts promoted by Mo-Na₂O (49)213

Influence of the support on the catalytic properties of nickel/ceria in carbon monoxide and benzene hydrogenation (46)269

Effects of chloride precursors on the palladium valency and surface structures of Pd-Mg²⁺/SiO₂ catalysts for carbon monoxide hydrogenation (57)55

Methanol synthesis on monovalent copper species stabilized on silica and zinc oxide (51)141

Synthesis of higher alcohols over copper/cobalt catalysts. Influence of preparative procedures on the activity and selectivity of Cu/Cu/Zn/Al mixed oxide catalysts (53)279

Higher alcohols synthesis from CO + 2H₂ on cobalt-copper catalyst. Use of probe molecules and chemical trapping in the study of the reaction mechanism (53)197

Morphology and catalytic activity of FeRe bimetallic catalysts supported on silica. II. Catalytic activity in the carbon monoxide-hydrogen reaction (51)49

Double promotion of palladium/silica catalysts by iron and magnesium oxide in synthesis of methanol from carbon monoxide and hydrogen (45)71

Structure and activity in CO/H₂ of Cu/ZnO/Al₂O₃ methanol synthesis catalysts (60)61

Methanol synthesis catalysts derived from ternary rare earth, copper, zirconium and rare earth, copper, titanium intermetallic alloys (58)69

Promoting effects of lithium on Pd/CeO₂ catalysts in carbon monoxide-hydrogen reactions: Chemical trapping and temperature-programmed desorption studies (51)165

T

Talc

Catalytic properties of lithium carbonate melts and related slurries for the oxidative dimerization of methane (56)149

Tar acids

Catalytic hydrodealkylation of tar acids (45)39

Tar sand

Catalytic effect on hydrogen sulphide generation from a tar sand (53)81

Tellurium

Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts — a review (57)149

Temperature influence

Oligomerization of ethene over nickel-exchanged zeolite Y into a diesel-range product (42)325

Temperature-programmed decomposition

Temperature-programmed decomposition as a probe for the surface reactivity of heterogeneous catalysts. Model system Os₃(CO)₁₂ supported on silica and alumina (46)145

Temperature-programmed desorption

Acidic properties of ZSM-5 zeolite and conversion of ethanol to diethyl ether (41)13

Determination of the number and acid strength of acid sites in zeolites by ammonia adsorption. Comparison of calorimetry and temperature-programmed desorption of ammonia (42)239

Nitric oxide chemisorption and temperature-programmed desorption study of cobalt and molybdenum catalysts supported on activated carbon and alumina (42)307

Flue gas desulphurisation: Catalytic removal of sulphur dioxide by carbon monoxide on sulphided La₁-

xSr₂CoO₃. I. Adsorption of sulphur dioxide, carbon monoxide and their mixtures (41)273

Cyclohexane hydrogenation on rhodium catalysts in the gas phase. Kinetics of the reaction and origin, mechanism and kinetics of the deactivation process (46)131

Temperature-programmed reduction of hydrodesulphurization catalysts (46)11

Structure and reactivity of titania-supported oxides: IV. Characterisation of dried vanadia/titania catalyst precursors (46)89

Temperature-programmed reduction

Interaction between iridium and platinum precursors in the preparation of iridium platinum catalysts (42)61

Use of catalytic detector in temperature-programmed reduction (58)147

Synthesis and characterization of bimetallic clusters prepared by sublimation of Re₂(CO)₁₀ onto Pt/NaY (46)45

Temperature-programmed reductive decomposition

Synthesis and characterization of bimetallic clusters prepared by sublimation of Re₂(CO)₁₀ onto Pt/NaY (46)45

Temperature-programmed sulphiding

Iron sulphide containing hydrodesulphurization catalysts. Mössbauer study of the sulphidability of α -iron(III) oxide (42)153

Temperature runaway

Effect of oxygen concentration on temperature runaway during regeneration of hydrotreating catalyst (44)189

Terpenes

Catalytic hydrodesulphurization of terpenes (50)87

Testing

FCC catalyst performance evaluation (43)213

Activity of steam reforming catalysts: Role and assessment (43)283

Automated testing of methanol synthesis catalysts (43)301

Pilot plant testing of hydrotreating catalysts: Influence of catalyst condition, bed loading and dilution (43)251

In situ study of catalysts. Application in methanol synthesis and ethylene epoxidation (43)311

Design of laboratory hydrotreating reactors scaling down of trickle-flow reactors (43)273

Thallium oxide/silica

Oxidative coupling of methane over thallium based silica supported catalysts (54)241

Thermal stability

Thermal stability of alkali metals deposited on oxide supports and their influence on the surface area of the support (42)217

Thermal treatment

Effect of thermal treatment on the reducibility of alumina-supported nickel catalysts (51)223

Thermoresistance

Activity and thermoresistance of fused iron catalysts for ammonia synthesis (58)29

Thermostability

Preparation and characterization of thermostable silver on α -alumina catalysts (44)133

Thiele modulus

Performance of the Minilith — A shaped hydrodemetallation catalyst (42)47

Thiele parameter

Effectiveness of reaction proceeding with degree kinetics in a plate catalyst grain (46)189

Thin film catalyst

Reaction selectivity as a test for catalysis on exposed metal (48)235

Thiophene

Existence of synergy between "CoMoS" and Co₉S₈: New proof of remote control in hydrodesulfurization (50)L7

Thiophene hydrodesulfurization

Sulfidation of carbon-supported iron oxide catalysts (51)263

Hydrodesulfurization activity and characterization of sulphided molybdenum and cobalt-molybdenum catalysts. Comparison of alumina-, silica-alumina- and titania-supported catalysts (52)211

Thiophene hydrodesulfurization activity of alumina-, silica- and carbon-supported sulphided Re₂O₇ catalysts (48)241

Thiophene hydrodesulfurization on fresh, spent, and treated catalysts (51)295

Thermal stability of Co-Mo/Al₂O₃ hydrodesulfurization catalyst (52)181

Effect of phosphorus on molybdenum-based hydrotreating catalysts. II. Hydrodesulfurization activity and characterization of the sulphided state of P-Mo/Al₂O₃ systems (48)353

Model hydrodesulfurization catalysts: solid state synthesis and characterization of iron containing molybdenum sulphide (56)281

Studies of molybdena-alumina catalysts. XVII. Sulfided catalysts exposed to air (58)199

Thiophene hydrogenolysis

Sulphide catalysts on silica as a support. VIII. Peculiarities of thiophene hydrogenolysis and probable nature of "synergetic effect" (45)191

Three-way automotive catalysts

Periodic operation effects in propane and propylene oxidation over noble metal catalysts (49)195

Tin

Effect of added Sb₂O₄, BiPO₄ or SnO₂ on the catalytic properties of ZnFe₂O₄ in the oxidative dehydrogenation of butene to butadiene (51)235

Tin oxide

Performance of promoted SnO₂ catalysts designed by an expert systems approach for oxidative dehydrogenation of ethylbenzene (50)L13

Solid catalyst treated with anion: XIX. Synthesis of the solid superacid catalyst of tin oxide treated with sulfate ion (59)205

Tin oxide/magnesia

Oxidative dimerization of dimethyl ethene with solid catalysts (53)L5

Tin(IV) oxide

Effect of antimony(IV) oxide, bismuth phosphate and tin(IV) oxide on the catalytic properties of compound oxide catalysts in the oxidative dehydrogenation of n-butene (47)113

Titanate catalysts

Methane oxidative coupling over titanate catalysts (53)183

Titania/alumina

Surface acidity, catalytic activity and selectivity of some oxides supported on alumina (41)1

Titanium

Methanol synthesis catalysts derived from ternary rare earth, copper, zirconium and rare earth, copper, titanium intermetallic alloys (58)69

Titanium oxide

Studies on the promotion of nickel-alumina coprecipitated catalysts. I. Titanium oxide (45)239

Titanium silicalite

Titanium silicalite-2: Synthesis, characterization and catalytic properties (58)1

Titanium-silicate zeolites

Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium-silicate zeolites (57)L1

Titanium-vanadium pyrophosphate

Preparation of high-surface-area titanium-vanadium binary pyrophosphate catalysts (48)51

Toluene ammoxidation

Ammoxidation of toluene over coke-covered alumina (59)129

Toluene benzylation

Solid catalyst treated with anion: XVIII. Benzylation of toluene with benzoyl chloride and benzoic anhydride catalysed by solid superacid of sulfate-supported alumina (59)197

Toluene disproportionation

Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization (57)167

Preparation of iron/zeolite catalysts active for toluene disproportionation in the presence of hydrogen sulphide (43)57

Toluene hydrogenation

Catalytic storage of hydrogen: Hydrogenation of toluene over a nickel/silica aerogel catalyst in integral flow conditions (42)121

Characterization of the standard platinum/silica catalyst EUROPT-1. VI. Catalytic properties (41)313

Toluene methylation

Oxidative methylation of toluene with methane over alkali metal bromide loaded rare earth oxides (53)L19

Toluene oxidation

Effect of water on the catalytic oxidation of toluene over vanadium oxide catalysts (53)251

Transfer hydrogenation

Heterogeneous catalytic transfer hydrogenation reactions of 4-nitrophenylamine (59)1

Triacylglycerol distribution

Effect of pore diffusion on the triacylglycerol distribution of partially hydrogenated trioleylglycerol (43)339

Trickle-flow reactors

Design of laboratory hydrotreating reactors scaling down of trickle-flow reactors (43)273

Triflic acid

The bioethanol-to-ethylene (B.E.T.E.) process (48)265

Trifluoromethanesulfonic acid

The bioethanol-to-ethylene (B.E.T.E.) process (48)265

Trimethylbenzene disproportionation

Physical and catalytic properties of smectite clays pillared by alumina in disproportionation of 1,2,4-trimethylbenzene (45)171

Trioleylglycerol hydrogenation

Effect of pore diffusion on the triacylglycerol distribution of partially hydrogenated trioleylglycerol (43)339

Tungsten oxide/alumina

Hydrodesulfurization activity of WO₃/ γ -alumina prepared by the equilibrium adsorption method (59)185

Tungsten sulphide/alumina

Characterization of γ -alumina-supported tungsten sulfide hydroprocessing catalysts. I. Low-temperature oxygen chemisorption (41)165

U

Unsteady states

Catalytic reaction selectivity in unsteady states (53)89

Upflow

Upflow versus downflow testing of hydrotreating catalysts (43)237

V

Valency

Valency and adsorption characteristics of a sulphided $\text{MoO}_3/\gamma\text{-Al}_2\text{O}_3$ methanation catalyst (55)11

Vanadia/titania

Influence of phosphorus in vanadium-containing catalysts for NO_x removal (55)151

Structure and reactivity of titania-supported oxides: IV. Characterisation of dried vanadia/titania catalyst precursors (46)89

Structure and selectivity changes in vanadia-titania catalysts used to promote the reduction of nitric oxide with ammonia (52)225

Vanadia/titania-silica

Vanadia supported on titania-silica: Physical characterization and activity for the selective reduction on nitric oxide (51)67

Ammonia adsorption on vanadia supported on titania-silica catalyst. An infrared spectroscopic investigation (51)81

Vanadia-chromia

Selective alkylation of phenol to 2,6-xyleneol over vanadia-chromia mixed oxide catalysts (49)165

Vanadium oxide/tin oxide

Titration of active sites for partial oxidation of methanol over $\text{V}_2\text{O}_5/\text{SnO}_2$ and $\text{MoO}_3/\text{SnO}_2$ catalysts by a low-temperature oxygen chemisorption technique (55)L1

Vanadium oxide/titania

Effect of water on the catalytic oxidation of toluene over vanadium oxide catalysts (53)251

Selectivities and intermediates in the oxidation of butene on vanadium oxides on titania (49)273

Vanadium oxides

Complete catalytic oxidation of benzene over supported vanadium oxides modified by palladium (49)125

Vanadium pentoxide

Catalytic combustion of soot deposits from diesel engines (60)143

Combustion of soot deposits from diesel engines on mixed oxides of vanadium pentoxide and cupric oxide (60)157

Vanadium phosphate

Amoxidation of picolines on vanadium phosphate catalysts (49)205

Effect of water vapor on the activity and selectivity characteristics of a vanadium phosphate catalyst towards butane oxidation (41)225

Vanadium/phosphorus oxide

Effect of support material on the adsorption structures of furan and maleic anhydride on the surface of $\text{V}_2\text{O}_5/\text{P}_2\text{O}_5$ catalysts. II. Results of in situ infrared spectroscopic studies (45)9

Preparation of vanadium-phosphorus oxide catalysts. I. Dissolution and reduction of vanadium pentoxide and isolation of the precursor (42)91

Effect of support material on the catalytic performance of $\text{V}_2\text{O}_5/\text{P}_2\text{O}_5$ catalysts for the selective oxidation of but-1-ene and furan to maleic anhydride and its consecutive nonselective oxidation. I. Results of catalytic testing (45)1

Vanadium/silica-alumina

Vanadium interactions with treated silica aluminas (45)291

X-ray absorption study of vanadium on regenerated catalytic-cracking catalysts (51)255

Vanadium-titanium

Effect of the composition of vanadium-titanium binary phosphate on catalytic performance in vapor-phase aldol condensation (54)29

Reaction of acetic acid with methanol over vanadium-titanium binary phosphate catalysts in the presence of oxygen (59)227

Vanadium-molybdenum oxide

Segregation and chemical state of vanadium and molybdenum in vanadium-molybdenum oxide catalyst studied by X-ray photoelectron spectroscopy (56)207

Vanadyl phosphate

Regeneration of a P-V-O-Zn butane oxidation catalyst using chlorine containing hydrocarbons (51)13

Vanadyl pyrophosphate

Nature of the active sites of $(VO)_2P_2O_7$ in the selective oxidation of n-butane. Evidence from doping experiments (48)13

Vapour-phase esterification

Catalytic activity of sulphonated styrene-divinylbenzene resins (48)307

Veratrole

Influence of sulphur level on hydrodeoxygenation (52)41

Vinyl chloride

Vapour phase hydrochlorination of acetylene with group VIII and IB metal chloride catalysts (43)33

Vinylacetylene hydrogenation

Effect of dispersion of supported palladium on its electronic and catalytic properties in the hydrogenation of vinylacetylene (42)131

Effect of Pd/C dispersion on its catalytic properties in acetylene and vinylacetylene hydrogenation (54)277

Void structure

Isomerization and disproportionation of m-xylene. Selectivities induced by the void structure of the zeolite framework (45)85

Volatility

Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts — a review (57)149

Voohries equation

Deactivation of iron oxide-iron phosphate catalyst in isopropanol dehydration (55)181

Vycor glass

Selective oxidation of methane over Vycor glass, quartz glass and various silica, magnesia and alumina surfaces (44)33

W

Wash-coat

Fibrillar alumina as a wash-coat on monoliths in the catalytic oxidation of xylene (55)123

Water

Selectivity to cyclohexene in the gas phase hydrogenation of benzene over ruthenium, as influenced by reaction modifiers. I. Adsorption of the reduction modifiers, water and ϵ -caprolactam on ruthenium (58)281

Water addition

Effect of water on the catalytic oxidation of toluene over vanadium oxide catalysts (53)251

Water soaking

Influence of water soaking on the structure and properties of fused-iron catalyst for ammonia synthesis (55)33

Water vapour

Effect of water vapor on the activity and selectivity characteristics of a vanadium phosphate catalyst towards butane oxidation (41)225

Water-gas shift reaction

Hexane-carbon dioxide reaction catalyzed by alkaline earth metal oxides. II. Reaction network (41)199

Investigation of Kölbel-Engelhardt synthesis over iron-based catalysts (47)205

Manganese oxide water-gas shift catalysts. Initial optimization studies (51)127

Study of copper-zinc oxide catalysts, characterisation of the coprecipitate and mixed oxide (55)165

Kinetic study of the low-temperature water-gas shift reaction over a Cu-ZnO catalyst (49)285

Influence of carrier doping on catalytic performance of titanium dioxide supported platinum (46)297

X

X-ray photoelectron spectroscopy

Structure and reactivity of titania-supported oxides: IV. Characterisation of dried vanadia/titania catalyst precursors (46)89

X-ray microprobes

Study of structural and mechanical properties of granulated alumina supports using X-ray microprobes (55)75

Xylene disproportionation

Isomerization and disproportionation of m-xylene. Selectivities induced by the void structure of the zeolite framework (45)85

Xylene isomerization

Surface passivation and shape selectivity in xylene isomerization over ZSM-48 (55)265

Cracking of C₉ paraffins over xylene isomerization catalysts (57)179

Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization (57)167

Xylene oxidation

Fibrillar alumina as a wash-coat on monoliths in the catalytic oxidation of xylene (55)123

Xylenol synthesis

Synthesis of 2,6-xylenol by alkylation of phenol with methanol (47)347

Y

Yttrium oxide calcium oxide

Oxidative coupling of methane over Y₂O₃-CaO catalysts (59)59

Z

Zeolites

Effect of silicon-to-aluminium ratio and synthesis time on high-pressure olefin oligomerization over ZSM-5 (56)263

Acidic properties of ZSM-5 zeolite and conversion of ethanol to diethyl ether (41)13

Hydrocarbon synthesis over palladium/ZSM-5 bifunctional catalysts (41)65

Methanol conversion on aluminophosphates with zeolite structure (42)1

Diffusion, cracking and coking on HZSM-5 of various morphologies (42)15

About coke deposition on zeolite HY. A ¹²⁹Xe-NMR study (43)L5

Effect of preliminary treatment with ammonia on the reduction of CuY zeolite (45)27

Role of zeolite non-framework aluminium in catalytic cracking (45)307

Influence of the pretreatment of cracking catalysts activity and selectivity (47)131

Role of Brønsted and Lewis acid sites during cracking reactions of alkanes (47)33

Cyclization of citronellal to isopulegol by zeolite catalysis (47)363

Hydroisomerization of branched-chain olefins over Pt/H-ZSM-5 zeolite (47)67

Synthesis and shape-selective properties of ZSM-22 (48)137

The bioethanol-to-ethylene (B.E.T.E.) process (48)265

Low-temperature plasma calcination of zeolite NH₄Na-Y (48)373

Selective alkylation of alkylbenzenes in the presence of HZSM-5 zeolites (49)101

Shape selectivity of zeolite EU-1 in reactions of aromatic hydrocarbons (49)307

Coupled conversion of methanol and C₄ hydrocarbons to lower olefins (50)149

- Hydrogenation of carbon monoxide over iron catalysts on different supports (50)211
- Oxidative dehydrogenation of cyclohexene over cobalt-exchanged Y-zeolites (50)55
- X-ray absorption study of vanadium on regenerated catalytic-cracking catalysts (51)255
- Aromatization of n-hexane over Pt-KL catalyst (51)L7
- Alkylation of benzene using an aqueous solution of ethanol (53)157
- Acid catalyzed formation of ethyl tertiary butyl ether (ETBE) (53)263
- Hydroxyl groups in phosphorus-modified HZSM-5 (53)299
- Coking and deactivation of zeolites - a review (54)1
- Determination of framework concentrations of gallium in [Ga]-ZSM-5 (54)177
- Coke deposits on H-ZSM-5 zeolite (54)289
- Calculated equilibria for the alkene and alcohol aromatization processes (54)37
- Aromatization of n-hexane over galloaluminosilicate and gallosilicate (55)115
- Surface passivation and shape selectivity in xylene isomerization over ZSM-48 (55)265
- Redispersion of Pt-zeolite catalysts with chlorine (56)137
- Effect of dealumination defects on the properties of zeolite Y (56)83
- Iron complexes used for the preparation of zeolites supported iron catalysts (56)L1
- The very large pore molecular sieve VPI-5: an aluminophosphate-hydrate! (56)L21
- Cracking reactions of C₆ paraffins on HZSM-5 (57)105
- Coupled conversion of methanol and C₄-hydrocarbons (CMHC) on iron-containing ZSM-5 type zeolites (57)203
- Formation and hydrolysis of acetals catalysed by acid faujasites (59)333
- Catalytic properties in cyclohexene transformation of modified HY zeolites (60)101
- Mechanism of hexane cracking in ZSM-5 (60)137
- Framework and extra-framework aluminium distribution in (NH₄)₂F₆Si-dealuminated Y zeolites. Relevance to cracking catalysts (50)287
- Extraction of extra-framework aluminium in ultra-stable Y zeolites by (NH₄)₂SiF₆ treatments. I. Physicochemical characterization (59)267
- Determination of the number and acid strength of acid sites in zeolites by ammonia adsorption. Comparison of calorimetry and temperature-programmed desorption of ammonia (42)239
- Influence of the level of dealumination on the selective adsorption of olefins and paraffins and its implication on hydrogen transfer reactions during catalytic cracking on USY zeolites (47)123
- Heats of adsorption and mass transfer coefficients of alkanes in zeolites Y and ZSM-20 (53)273
- Design of synthetic zeolites as catalysts in organic reactions: Acylation of anisole by acyl chlorides or carboxylic acids over acid zeolites (49)109
- Oxidative redispersion of palladium and formation of PdO particles in NaY. An application of high precision TPR (54)189
- Structural recognition and preorganization in zeolite catalysis: Direct aromatization of n-hexane on zeolite L-based catalysts (45)L15
- Enhancement of the aromatizing activity of ZSM-5 zeolite induced by hydrogen back-spillover. Aromatizing the outstream gases of a propane steam-cracker (52)1
- Effect of silicon-to-aluminum ratio and template on the cracking of C₆-C₈ alkenes over ZSM-5 zeolite (60)87
- Activation of zeolite- Ω . I. Physicochemical characterization of calcined and self-steamed samples (42)105
- Low-temperature hydrocarbon conversion over rare-earth-exchanged zeolite X catalyst (42)169
- Effects of pH during preparation on the physicochemical, acidity and catalytic properties and coking tendencies of HZSM-5-type catalysts (49)27
- Effect of the temperature regime of methanol conversion to hydrocarbons on coking of zeolite catalysts and their regeneration (43)85
- Preparation of PtHY catalysts. Influence on the catalytic properties of the complexes used as platinum precursors (45)325

Chemical modification of H-ZSM-5 by adsorption of rhodium and phosphorus complexes (50)131

Reply to "comments on diffusion of alkanes in molecular sieves: Evidence for confinement effects" (52)169

Comments on "diffusion of alkanes in molecular sieves: Evidence for confinement effects" (52)165

Influence of cerium on the catalytic properties of ZSM-20 zeolite in the cracking of n-heptane: Comparison with rare earth Y zeolites (49)175

Coking and regeneration of zeolite catalysts in fixed beds during cumene cracking (58)53

Coking, ageing and regeneration of zeolites. XI. Coke formation and deactivation of Pt-ultrastable zeolite HY and PtH-mordenite catalysts during hydrogenation of benzene (58)189

Magic-angle-spinning nuclear magnetic resonance and adsorption studies of dealumination and realumination of zeolite ZSM-5 (56)L15

Para-selectivity of dialkylbenzenes over modified HZSM-5 by vapour phase deposition of silica (54)257

Highly selective dimerization of ethylene over Pd-Mg-X zeolite and determination of its active sites by infrared spectroscopy (52)81

Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization (57)167

Shape selectivity in Y-zeolites. Catalytic cracking of decalin-isomers in fixed bed micro reactors (58)105

Conversion of methanol on ultrastable faujasitic catalysts. Selective formation of hexamethylbenzene (42)195

Conversion of methanol to hydrocarbons over silica-alumina. Selective formation of lower olefins (54)139

Catalytic activity and product distribution in the cracking of n-hexane over heteropoly oxometalates and ZSM-5 zeolite (47)95

Effects of the addition of zeolites on ruthenium catalysts in carbon monoxide hydrogenation (49)45

Preparation of iron/zeolite catalysts active for toluene disproportionation in the presence of hydrogen sulphide (43)57

Limitation of n-hexane and 3-methylpentane conversion over zeolite ZSM-5 by intracrystalline diffusion (59)311

Zeolites as base catalysts: Condensation of aldehydes with derivatives of malonic esters (59)237

Comments on induction periods for synthesis of hydrocarbons from syngas over metal/zeolite catalysts using a two stage process (43)193

Deactivation resistance of ZSM-5 type zeolites containing alkaline earth metals used for methanol conversion (41)121

Methanol conversion to hydrocarbons. Primary versus secondary formation of methane and ethene (42)29

HZSM-5 pelletized and modified with α -Ca₃(PO₄)₂ and HPO₄²⁻ as a catalyst for methanol conversion (49)143

Factors affecting the selectivity of the aromatization of light alkanes on modified ZSM-5 catalysts (41)89

Quantitative monitoring of the crystallization of zeolite ZSM-5/silicalite in non-alkaline media (56)L9

Effect of crystallization time on the physicochemical and catalytic properties of a ZSM-5 type zeolite (42)35

Chemical vapour deposition method for fine-control of the pore-opening size of Na-mordenite (44)95

Synthesis and characterization of bimetallic clusters prepared by sublimation of Re₂(CO)₁₀ onto Pt/NaY (46)45

Catalytic hydroprocessing of simulated coal tars. II. Effect of acid catalysts on the hydroconversion of model compounds on a sulphided Ni-Mo/Al₂O₃ catalyst (54)101

Effects of acid strength of fluid cracking catalysts on resid cracking operation (50)1

Octane enhancement in fluid catalytic cracking. II. Operation in the overcracking regime (58)19

Oligomerization of ethene over nickel-exchanged zeolite Y into a diesel-range product (42)325

DTA apparatus as a catalytic microreactor with on-line analysis of the products (51)181

Contrast between H-ZSM-5 and H-Fe-silicates of the pentasil pore structure in propylene conversion (51)155

Examination of the behaviour of Pt/Al₂O₃ and Pt-Re/Al₂O₃ reforming catalyst in the presence of ZSM-5 zeolite (47)59

Quality control in the preparation of zeolite ZSM-5 using a catalytic test reaction (55)259

Conversion of ethanol in aqueous solution over ZSM-5 zeolites. Study of the reaction network (58)119

Octane enhancement in fluid catalytic cracking. I. Role of ZSM-5 addition and reactor temperature (58)1

Conversion of light alkanes to aromatic hydrocarbons. II. Role of gallium species in propane transformation on GaHZSM5 catalysts (43)155

Zeolites in organic reactions. Condensation of formaldehyde with benzene in the presence of HY zeolites (51)113

Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium-silicate zeolites (57)L1

Effect of acidity of HZSM-5 type zeolite on conversion of alkenes and alkanes to gasoline and aromatics (59)75

Isomerization and disproportionation of m-xylene. Selectivities induced by the void structure of the zeolite framework (45)85

Catalytic cracking of gasoil: Benefits in activity and selectivity of small Y zeolite crystallites stabilized by a higher silicon-to-aluminium ratio by synthesis (55)65

Infrared and calorimetric studies of the adsorption of carbon monoxide on zeolite-supported iridium catalysts (46)227

Selective hydroformylation of ethene and propene catalysed on NaY zeolite-entrapped Rh₆ and bimetallic RhFe clusters and their structural characterization by extended X-ray absorption fine structure and Fourier transform infrared spectroscopy (50)294

Hydrodenitrogenation using ternary metal catalyst on mixed zeolite- γ -alumina supports (47)331

Conversion of propene into gasoline and middle distillate using alkali-doped ZSM-5 zeolite catalysts (45)L1

Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts (57)31

Zeta potential

Surface changes of alumina induced by phosphoric acid impregnation (56)197

Zinc oxide

Investigation of the features of zinc oxide-based catalysts for propylene dehydroaromatization (44)179

Zinc oxide/chromia

Effect of carbon dioxide on methanol synthesis over different catalysts (49)83

Zinc oxide-calcium oxide

Conversion of ethanol to acetone over zinc oxide-calcium oxide catalyst. Optimization of catalyst preparation and reaction conditions and deduction of reaction mechanism (52)237

Zinc-chromium oxide spinel

Higher alcohol synthesis over alkali metal-promoted high-temperature methanol catalysts (47)313

Zinc-iron oxide

Effect of added Sb₂O₄, BiPO₄ or SnO₂ on the catalytic properties of ZnFe₂O₄ in the oxidative dehydrogenation of butene to butadiene (51)235

Zirconia

Zirconia as a support for catalysts. Evolution of the texture and structure on calcination in air (57)127

Zirconium

Methanol synthesis catalysts derived from ternary rare earth, copper, zirconium and rare earth, copper, titanium intermetallic alloys (58)69

Zirconium oxide

Dehydrocyclodimerization of 1,3-butadiene catalyzed by magnesium oxide and zirconium oxide (47)L7

Zirconium oxide-sulphate

Deactivation of H-mordenite and ZrO₂/SO₄²⁻ during n-butane isomerization (46)103



